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Alcohol and agressive behavior: A community study with a cross-cultural perspective

I. Introduction: Rationale, fieldwork and methodological considerations of the study.

by

Kai Pernanen

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ABSTRACT

This preliminary report describes the rationale, methodology and fieldwork of an intensive field study of alcohol use and its connection with aggressive behaviour. In a discussion of the research strategy, shortcomings in different types of methods are pointed out as well as the compromises to the theoretically ideal sampling universe of the present study. In an attempt to eliminate the weaknesses of one method by the complementary use of other methods, the methodology involved the collection of three different sets of data during overlapping time periods: 1) Data from 1110 personal interviews on experiences of violence and alcohol use patterns in the general population of Thunder Bay, 2) Data from 636 hours of observation in public drinking places in Thunder Bay, and 3) Data from police records on 848 occurrences of violent crime in Thunder Bay during a one-year period. A cross-cultural perspective involved the collection of interview data from a sample of 262 residents of Finnish origin, for comparison with residents of non-Finnish origin and data from Finland. Each data collection method is presented with a discussion of sampling procedures, instruments used, and particulars of the fieldwork. Some data on the two main clusters of variables, i.e., alcohol use and aggressive behaviour, are given together with data on response rates, causes of attrition, representativeness of interview study sample etc. Appendices include copies of instruments used in the study.

ACKNOWLEDGEMENTS

This study is funded by the Promotion and Prevention Directorate (formerly Non-Medical Use of Drugs Directorate) of Health and Welfare Canada (RODA Grant 1212-5-236). The Addiction Research Foundation of Ontario has administered the funds. The Social Studies Department of A.R.F. has provided assistance with office expenses, a telephone and secretarial help, and has also provided some office space. The Thunder Bay Regional Office of A.R.F. provided office space and other assistance during the field work stage of the project.

Former Police Chief Onni Harty, Police Chief Tom R. Keep and former Planning and Research Officer Gary Lowry of the Thunder Bay Police Force made possible the use of police records of violent crime. This helped the study gain additional depth. The 41 interviewers and 12 observers who carried out the fieldwork for the study, in at times difficult winter conditions,deserve a great deal of credit for the fact that the fieldwork has yielded material potentially relevant for both policy and theory in this area.

The dedicated and capable assistance of Kerstin Carsjo throughout every phase of this project has been of vital importance, especially so during the very demanding period of fieldwork when working hours often stretched to more than 10 hours a day seven days a week. Ron Kerr, whose help with the coding and processing of data has been invaluable, has also contributed with keen insights and fertile practical suggestions about coding and analyses. In translating the sometimes vague analytical requirements into a precise and still flexible format and for providing so many useful suggestions we could not have wished for better expertise than that of Henzel Jupiter.

Tuija Puiras provided assistance with office chores and supervision during the collection of interview data. Marc Metsaranta supervised the collection of observational data in the second half of the field work stage. Such competent and conscientious support eased a great deal of the pressures of fieldwork.

To Mr. Heimar Tuomisto and other members of the Finnish community, too numerous to be mentioned by name, go special thanks for their unselfish support of this project.

Last in chronology, but not in importance, is the capable help provided by Dauna Jones and Paulette Walters in typing several versions

of the manuscript, and earlier material needed for conducting the project.

For all this assistance the author expresses his gratitude.

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ALCOHOL AND AGGRESSIVE BEHAVIOUR: A COMMUNITY STUDY WITH A CROSS-CULTURAL PERSPECTIVE

by

K. Pernanen

A. INTRODUCTION

This is an introductory report of an intensive field study of alcohol use and its connection with aggressive behaviour. In this report the rationale, methodology and fieldwork of the study will be presented together with some data on the two main clusters of variables, i.e. alcohol use and aggressive behaviour. Some measurement problems of these variables and their possible resolutions will also be discussed.

The methodology of the study was dictated by the goals of maximum depth of analyses and validity of results. For these reasons, a community study using several complementary methods of data collection was the approach chosen.

The study is an ongoing project with some less structured types of data still to be collected. Thus, this report is preliminary in nature. The substantive results of the study will be presented in several subsequent reports. A more interpretive monograph of the study will be prepared at a later date.

Data which have relevance for other questions in alcohol epidemiology than the connection between alcohol and aggression are available and will also be analysed and presented in separate reports.

1. Evidence of the relationship between alcohol use and aggression

There is ample epidemiological evidence of a statistical association between alcohol use and violent crime (e.g., Wolfgang, 1958; Verkko, 1951; Mayfield, 1972; Shupe, 1954; Macdonald, 1961; Tinklenberg, 1973; Wilentz and Brady, 1961; LeRoux and Smith, 1964; Pernanen, 1976; Aarens, *et al*., 1978). This evidence extends over different cultures and time periods.

Epidemiological data show that the extent of alcohol involvement in the offender and victim varies between different types of violent crime. It is generally highest for homicides and assaults. The best North American studies (e.g., Wolfgang, 1958; Macdonald, 1961; Mayfield, 1972) indicate that the offender had been drinking before the commission of a homicide or an assault in 50-60% of the cases, and the victim had been drinking in about 40-50%. Wolfgang (1958) found that both offender and victim had been drinking prior to the crime in 43.5% of the homicides in Philadelphia; alcohol was present in 63.6% of the homicide situations in either offender or victim or in both.

On the aggregate level using time series data, Lenke (1975) has shown a very close relationship between sales of alcoholic beverages and rates of violent crimes in Sweden. Aho (1976), in his incisive study using Finnish data, has added an intriguing finding on the aggregate level by noting that despite an increase in assault rates and per capita consumption of alcohol (which will show a positive relationship in time series data), the proportion of alcohol related violent crime has been stable during the period. Thus, crimes of violence which were not connected with alcohol use have increased at the same rate as those so connected and only part of the increase in violent crimes could thus be "explained" by increasing alcohol consumption.

In rapes, the figures are lower than in homicides and assaults: the most representative studies indicate that the offender had been drinking in 20-30% of the cases (Amir, 1967). Alcohol was present in either the offender, victim or both in 34% of the rapes in Amir's own study in Philadelphia (1967). In 31% of the cases offenders had been drinking. For victims, the corresponding percentage was 24%. The alcohol involvement in child abuse is also comparatively high in the few methodologically and geographically scattered studies that have been carried out (e.g., McCaghy, 1968; Nau, 1967). There is very little information available on the alcohol involvement of offenders in robberies. A study by Shupe (1954) with unknown generalizability shows it to be fairly high.

The epidemiological information on the association between alcohol use and different types of violent crimes is mostly based on ad hoc samples of varying and often biased nature. Thus, comparisons between studies, population and cultures are very difficult, if not impossible, to make. Very few studies are based on samples of such a nature that the findings can be related to population figures in order to arrive at incidence and prevalence estimates of violent crime, and specifically alcohol-related violent crime, in the general population and sub-populations. Two notable exceptions are Wolfgang's (1958) study of police records of homicide in Philadelphia in the period between 1948 and 1952, and the work of the Salmiala Committee in Finland in the 1930's, which used data from 1904-1913 and from 1920-1929 (Verkko, 1951) (although alcohol-related incidence and prevalence estimates were not specifically calculated in either study).

Only recently has anybody carried out even the most general study on the individual level relating drinking patterns with the risk of being involved in violent incidents. Aromaa (1977), in a national sample in Finland, found that the risk of being victimized in a violent incident was directly related to the frequency of alcohol use even when sex, age and other potentially relevant variables were controlled for.

The epidemiological data from police records or court records on violent crime provide us with correlational evidence of a possible causal connection between alcohol use and violent crime (and by extrapolation violent behaviour in general). Many biasing processes are, however, at work even in selecting instances of physical violence which come to the attention of the police (see e.g., Giffen, 1976[1]). This affects the validity of the empirical results and of the causal interpretations based on these.

Not surprisingly, perhaps, hypotheses regarding a direct causal influence of alcohol use on aggression (an imputedly physical violence) which have been tested in a number of studies with humans in experimental settings (Hartocollis, 1962; Hetherington and Wray, 1964; Bennet, et al., 1969; Shuntich and Taylor, 1972) and non-experimental settings (e.g., Bruun, 1959; McClelland, et al., 1972; Boyatzis, 1974) and with non-humans (e.g., MacDonell and Ehmer, 1969; Raynes and Ryback, 1970) have not tended to support the existence of a direct causal link in explaining the apparent epidemiological connection. They have yielded inconclusive and, at least on the surface, contradictory results. Partly this is no doubt due to the essentially ad hoc nature of the operationalization of "alcohol use". The experimental or quasi-experimental studies probably do not use BACs, durations of drinking occasions, etc., which would be representative of occasions on which aggression and violence occur. It seems probable that with the amounts consumed and BACs attained the effects of alcohol are not pronounced enough to lead to discernable changes on the dependent variables used. Another, additional factor can be that in experimental situations the most relevant internal or external cues for aggression and/or escalation into physical violence are not present to the same extent as in natural drinking settings. The predispositional factors of a psychological, sociological and/or biological nature which also probably determine reactions to alcohol are also not adequately varied in experimental studies. The populations tapped by psychological experiments are very different from those highly represented in records on violent crimes.

[illegible]

2. Long-term heavy drinking and violence

The role of alcoholism (or "problem drinking", "heavy drinking", etc.) in violent crime has also been studied (e.g., Banay, 1941; Goodwin et al., 1971; Mayfield, 1972; Ullman et al., 1957; Gibbens and Silberman, 1970). These studies have mainly been carried out on prison samples, and have established the proportion of alcoholics, problem drinkers or heavy drinkers (using widely differing operational definitions) in offenders in different types of crime. Few studies have been carried out on clinical samples of alcoholics to determine the prevalence of violent crime offenders. There has not been any systematic study of the proportion of alcoholic offenders in crimes carried out under the influence of alcohol. Even less has there been a study of physical violence or aggression which has not come to the attention of the authorities connected with a history of long-term heavy drinking. The role of long-term heavy drinking as a predisposing factor in aggressive behaviour (see e.g., van der Spuy, 1972) in connection with acute alcohol use, or as a factor in determining an increased likelihood of appearing in official records, etc., should also receive more systematic attention.

B. RESEARCH STRATEGY

1. The ideal sampling universe and some compromises

In order to make the reasons for the methods used in this study easier to understand, shortcomings in methods of earlier studies on the connection between alcohol use and violence will be pointed out.

Epidemiological studies have relied exclusively on official records of crimes of violence. Even the best of these are biased, due to factors which often are idiosyncratic to the jurisdiction in which they have been studied. This affects the results on characteristics of the violent incidents, the offender and victim, and also the degree of alcohol involvement. The samples are biased against less severe incidents of violence that occur in the general population. Moreover, the studies of police records do not include information on a number of potential causal variables, and do not specify the nature of "alcohol use prior to the crime". Only a few studies have related their findings to population bases.

The most important objection to using police records of violent crime as a sampling universe is that these provide the wrong base if we are interested in the causal role of alcohol use and the role of other concomitant variables as they relate to aggression and violence. The proportion of alcohol involvement in different violent incidents or violent crime occurrences does not tell us whether certain characteristics of alcohol use situations or alcohol users are overrepresented in these. For this purpose we should use the universe of drinking occasions to draw our samples from, and not the universe of violent acts. Only this way can we epidemiologically arrive at the incidence of aggression and violence in alcohol use situations and see what factors increase or decrease this incidence. A design of this type would also enable us to study the probability of aggression and violence over different values of the presumed independent variable and situational variables (type of beverage, amount consumed, 'setting', characteristics of participants, etc.) and characteristics of drinkers (heavy versus moderate and light drinkers, individuals with different attitudes towards accountability under the influence of alcohol, etc.).

The specific methods and samples selected for the study are the result of compromises between the various needs to:

1) get as complete a picture of the relationship between alcohol use and aggression, and factors that affect this relationship,
2) check for biases inherent in the methods applied, and to maximize the validity of results,
3) include enough variation on central variables, especially cultural ones, and
4) secure the possibility of a replication of the study under different cultural and structural conditions.

In order to understand the nature of these compromises it may be helpful to look at the theoretically ideal sampling universe, and the presumably optimal way of carrying out the study given the practical restrictions inherent in the methods employed.

The ideal theoretical universe of a study designed to meet the objectives listed above would consist of:

1) the set of all interpersonal acts of aggression, including physical violence as a subset, and
2) the set of all drinking occasions, and events when

individuals are "under the influence of alcohol", during a specific time period, with all cultural variations on central variables available for analyses.

For obvious reasons we have to be content with a sample, which is limited geographically and this limits our sample of acts, events and the participants in these acts and events. Practical reasons force us to take a sample of the universe of aggressive and violent acts and drinking occasions in Canada. Given certain conditions, the best way would be to take a sample representative of the totality of these acts and occasions in Canada during a certain time period. However, since unbiased documentations of these units do not exist, we have to rely on informants to supply us with the data. The best informants for this purpose are the individuals who took part in these occasions. This leads to a further narrowing of the universe and the potential sampling units. Since there is a tendency for incomplete or biased reporting due to forgetting, we have to drastically restrict the sampling units in time. For the same reason, we also have to conduct checks that show the extent of bias in the samples of aggressive incidents and drinking occasions which we have obtained. These checks would not be as necessary had it been established previously that the informant method yielded relatively unbiased information on aggressive acts and drinking occasions. In addition to forgetting, we have to contend with a tendency in our prospective respondents/informants to hide socially less desirable behaviour. This will undoubtedly be the case for at least some types of drinking and aggression, i.e., both the main independent and dependent variable in our study.

By delimiting our sample geographically we will inevitably reduce the variation along some central variables which may be causally relevant in explaining and perhaps, in future, preventing alcohol-related violence. The most important of these delimitations is on the variables the values of which are culturally and structurally determined. Fortunately, Canada is a country with relatively large variations on cultural variables. However, we cannot provide sufficient checks of biases in the reporting by the selected informants and cannot provide the depth of analyses so much needed by e.g., carrying out a study with a probability sample of all Canadians as informants on these acts. For this purpose we have to further delimit the sample geographically to provide for the possibility of these checks. This delimitation will also allow more in-depth analyses of the relationship between alcohol use and aggressive behaviour.

For these reasons we have chosen the format of a community study. In our selection of a community we have tried to counteract the reduction in variation on cultural and structural variables caused by the compromises we have been forced to make in our theretically ideal universe. Partly for these reasons a replication of the study under different cultural and structural conditions is also planned.

2. Crosscultural perspectives

Although the data are rather scattered, a positive relationship between alcohol use and violence has been shown to be fairly probable in a number of jurisdictions, countries and cultures. These countries include

Canada, the U.S., South Africa, Rhodesia, Finland, Poland, the Soviet Union, France and Norway. Some cultures seem to have higher alcohol involvement in violent crimes than others although the comparability of data and findings is questionable. Mainly anthropological data also suggest that some cultures (usually of the 'primitive' type) have successfully built up safeguards to minimize the occurrence of violence and aggression in alcohol use situations (e.g., Heath, 1958).

Some of the studies carried out in Canada on the association between alcohol use and violent crime have used very biased offender samples which make generalizations to the general offender population impossible. Pincock (1962) studied individuals referred to psychiatric examination by various courts in Metropolitan Winnipeg, and McKnight, et al. (1964) used a sample of 100 mentally ill homicide offenders in Ontario. In a more generalizable study, Tardif (1967) investigated homicide, assault, robbery and rape in Montreal. In addition, a subsample of victims in violent crime was included in the study by Cutler and Morrison (1971). The most extensive and representative data on the concordance of alcohol use and homicide has been published by Statistics Canada (1976). Although the findings presented in this publication do not seem to have fully utilized the possibilities of relevant analyses regarding the alcohol involvement in homicide incidents (the offender, victim or both), the data are the best available to date. The alcohol involvement in homicides in Canada during the period between 1961 and 1967 was 39.5% (with "alcohol and/or other drugs" an additional 0.4%) and between 1968 and 1974, 42.5% (with "alcohol and/or other drugs" an additional 4.7%)[2].

McDonald and Bygott (1977) have carried out an exemplary study of selected types of criminal occurrences which had come to the attention of the police in the regional municipality of Hamilton-Wentworth during a six-week period in 1975. Crimes against the person (attempted murder, assault, rape, other sexual offences, and negligence) showed alcohol involvement in 43% of the cases (N=353).

The one culture and jurisdiction in which data on alcohol and violent crime has been compiled proportionately more than in any other, is Finland. The authorities and policy makers have long been sensitive to the possible causal role of alcohol in violent crime. The proportion of homicides and assaults in which the offender had been drinking is ten to twenty percentage points higher than in the the most representative American studies. For homicides the following findings on alcohol involvement (drinking by offender or victim or both prior to the crime) have been reported: 70% in Vyborg County, Finland, in 1904-1929 (Verkko, 1951) and 73% in the whole of Finland in 1968 (Krokfors, 1970). Aho's (1976) data for the whole of Finland show that the proportions are generally somewhat lower. During 1956-1968 the alcohol involvement was 63.1% and for 1969-1974 it was 56.0% (N=557).[3] For assaults the figures given Verkko and Krokfors are 78% in Vyborg County in 1920-1929 (Verkko, 1951) and 65% in the whole of Finland during 1968 (Krokfors, 1970). In the data presented by Aho (1976) the alcohol involvement for aggravated assaults was 70.4% in 1956-1968 and 69.3% in 1969-1974. The corresponding proportions for other assaults were 51.0% and 51.9% respectively. Prior alcohol use by the offender in homicides has been reported as follows: 1) 65% (Finland, 1907-1920) and 55% (Vyborg County, 1920-1929), both by Verkko (1951) and 2) 66% (Helsinki, 1963-1968) by Virkkunen (1974). In assaults Verkko (1951) reports alcohol use by the offender in approximately 70% of the cases in Finland between 1904 and 1929 and in 56% of the cases in Vyborg County in the period 1920-1929. Aho (1967) in his study of aggravated assaults and homicides in Helsinki between 1950 and 1965 reports prior alcohol use by the offender in 85% of the cases (69% being "drunk" at the time of the offence). Alcohol use by homicide victims has been reported as follows: 1) approximately 40% in Finland between 1904 and 1929 (Verkko, 1951), 2) approximately 45% in Vyborg County in 1920-1929 (Verkko, 1951), and 3) 68% in Helsinki in 1963-1968 (Virkkunen, 1974). Victims of assaults have used alcohol prior to the assault: 1) in approximately 40% of the cases in the whole of Finland in 1904-1929 (Verkko, 1951), 2) in 44% of the cases in Vyborg County in 1920-1929 (Verkko, 1951), and 3) in 49% of the cases in the whole of Finland in 1974 (Tilastokeskus, 1976). Aho (1967) reports alcohol use by the victims of aggravated assaults and homicides in 70% of the cases in Helsinki between 1950 and 1965.

Many Finnish studies have been based on court records. Selection processes are probably at work to a larger extent and the recording of the circumstances of the crime more detailed in these than in police records, which have formed the basis for most North American studies. However, it seems unlikely that these factors would explain all of the differences in alcohol involvement between Finland and North America. Accepting the findings at their face value, we thus have a configuration in which a country with per capita consumption of alcohol traditionally among the lowest in the world shows an alcohol involvement of perhaps 55-65% in homicides and assaults. Regarding homicides it is considerably higher than in Canada judging from the latest estimates from police records: 39.5% in 1961-1967 and 42.5% in 1968-1974 (Statistics Canada, 1976).

The following table shows the annual per capita consumption in litres of absolute alcohol for Canada, Finland and Ontario over a number of years (Statistics Canada (a), (b); ALKO (a)):

Years	Canada	Finland	Ontario
1950	4.5	2.5	5.3
1955	4.4	2.8	5.3
1960	4.8	2.6	5.6
1965	5.1	2.9	6.0
1970	6.1	4.3	6.6
1973	7.4	5.6	7.8
1974	7.9	6.5	8.3
1975	8.2	6.2	8.5

The most recent year for which all the relevant statistics are available is 1974. In that year, the rates of homicide per 100,000 population were 2.3 in Finland and 2.4 in Canada. The rates for assaults and woundings were 430 in Canada and 290 in Finland per 100,000 population in 1974. (For Ontario the rate of homicide was 2.0, and for assaults and woundings 485.1) (Statistics Canada 1976a; Tilastokeskus, 1976). For that year the alcohol involvement in homicides was 67% (N=99) in Finland (Aho, 1976). For Canada we do not have data specifically for that year, but the data from Statistics Canada for the period 1968-1974 show an alcohol involvement of about 45%. On the basis of the above data, we get the following table for homicide rates per 100,000 in which alcohol was and was not involved:

Country	Alcohol Involved	No Alcohol Involved	Total Rate
Canada	1.1	1.3	2.4
Finland	1.5	0.8	2.3

There are considerable fluctuations between single years in the recorded alcohol involvement in Finland. Aho's figures (quoted above) show that the alcohol involvement was 63.1% in the period 1956-1968, and 56.0% in the period between 1969 and 1974. Due to this fluctuation the results for single years would fluctuate somewhat. The main finding would, however, remain: Finland has a higher rate of alcohol-involved homicides, and a lower rate of homicides in which alcohol was not used concomitantly by the offender, victim or both.

From the consumption figures in 1974 we can calculate the number of homicides in which alcohol was involved per 100,000 litres of absolute alcohol consumed. This rate is 1.3^{-6} for Canada and 2.4^{-6} for Finland. Expressed differently, there were about 410,000 litres of absolute alcohol consumed in Finland per alcohol-related homicide in 1974. The corresponding figure for Canada was about 750,000 litres. This means that the same amount of alcohol consumed in Finland is almost twice as likely to be involved in a homicide as in Canada[4]. For the 1950's and 1960's when alcohol consumption in Finland was still among the very lowest in the world, and the alcohol involvement seemingly higher, the differences would have been even more pronounced. This would also be true for comparisons with countries of much higher per capita consumption than Canada and relatively low rates of violent crime, such as France and Italy. Unfortunatley, systematic data on alcohol-involvement in violent crime are not available for these countries.

Assuming that these crude calculations and statistical information on which they are based are correct, we conclude that the explanation for this difference must lie in the distribution of consumption over occasions and consumers, the drinking patterns and cultural definitions of alcohol use or attitudes towards behaviour in alcohol use situations or under the influence of alcohol or any combination of these and similar factors. Drinking patterns which have been put forth by Finnish researchers as explanations of the high alcohol involvement in violent incidents include: drinking of large amounts at one sitting, drinking bouts of long duration and a preference for distilled spirits (without mixers). Verkko (1951) speculated on the possible biological characteristics of the Finnish population, which rendered it more prone to violence under the influence of alcohol. Recent interpretations have stressed the importance of subcultural behaviour patterns and cultural lifestyles which increase the likelihood of becoming a participant in a violent encounter (Aho, 1976; Aromaa, 1977). Whatever the true causal accounting of this difference between the two countries, the discrepancy provides, given certain assumptions, a minimum estimate of the excess of homicide due to factors connected with patterns of alcohol consumption, cultural and structural factors etc. Attempts at explaining the relationship between alcohol use and violent crime would receive valuable assistance if rates of alcohol-involved and alcohol-free violent crime were published separately (and for several countries or other jurisdictions).

3. Summary of objectives

The most general objective of this study is:

- To estimate to what extent alcohol is involved in, and contributes to an excess of, aggression and violence, and to locate factors which are connected with such an excess. This knowledge will assist us in estimating the extent to which alcohol policy measures can affect a decrease in the incidence of violence, and in locating the factors that can be manipulated in order to decrease the probability of alcohol-related violence. More specific objectives include the following:

- To study the incidence of alcohol-related violence and relate this to the incidence of violence that comes to the attention of the police in an epidemiologically delimited population and subgroups within this population. This will facilitate an assessment of the usefulness of police records of crimes of violence as indicators of violence and specifically alcohol-related violence.

- To establish characteristics of relatively high-risk alcohol-use situations and alcohol users in alcohol-related violence.

- To study the interactional processes and situational characteristics which lead to inception, escalation, and de-escalation in aggressive incidents under the influence of alcohol.

- To study the preventive significance of cultural, subcultural and some structural factors for the incidence of violence and specifically alcohol-related violence.

- To study the incidence of violence and alcohol-related violence in public drinking establishments and in other specific settings such as the home.

- To assist in the development of a research strategy in a widely scattered field. This pertains especially to experimental research designed to study the effect of alcohol use on aggression. It can be achieved by a) determining the prevalence of situational factors in natural alcohol use settings and the relationship of these factors to aggressive behaviour, by b) specifying the nature of the optimal independent variables (e.g., type and amount of alcoholic beverages consumed) to be used in this experimental research, and by c) specifying subpopulations of special interest.

- To collect correlational data on the relationship between a number of potential conjunctive and conditional factors in the etiology of alcohol-related violence. Evidence from the clinical and experimental literature lead one to suspect that such factors as sleep deprivation, bout drinking, certain settings, etc., are causally relevant.

- To study the correlational evidence for an etiological connection between comparatively long-term heavy drinking, aggression and violence, and to study the role of long-term heavy drinking in its relationship to aggressive behaviour.

- To replicate the study with all correlational analyses, analyses of the processes leading to aggression and escalation into violence and other relevant analyses in a culturally and structurally different sample.

The information gathered to meet these objectives should be as unbiased as possible, it should provide for the possibility of validity checks, and it should attempt to provide as complete a picture of the relationship as possible within the means available.

4. Methodology of the study

The nature of the potential independent variable "alcohol use", "being under the influence" etc., and the settings and predispositional factors possibly interacting with the use of alcohol can be studied in a survey approach and perhaps to some extent by using information gathered by the police to its fullest potential. A survey approach can also give us the beginnings of an epidemiology of interpersonal aggressive behaviour, behaviour which may escalate into interpersonal violence. This can give us clues as to what factors determine whether escalation takes place or not. Furthermore, an experimental approach testing specific causal hypotheses will have to use mild forms of aggression as its dependent variables and surveys may provide information on the best design of such experiments.

Police records have their great limitations in selection bias and missing variables of central importance. The survey method has greater potential value because of representativeness, specification of the independent variables (most importantly alcohol use variables) and inclusion of potential conditional variables of both the situational and predispositional type. Moreover, it enables a greater range in the dependent variable, such as varying degrees of aggression and in the characteristics of the escalatory process. There are, however, grave limitations to the survey method. The most important of these is that it does not provide causal insight into the actual process leading to 1) initiation of aggression, 2) escalation from aggressive initiation to physical violence, and 3) de-escalation or other types of resolutions of aggressive encounters. In the absence of representative settings for experimental research, natural settings should be used initially.

The only practically feasible settings available for this purpose, considering time, expenses, sample size and ethics, are the settings provided by public drinking establishments[5]. Public drinking places have been the focus of several studies, most of these using a predominantly descriptive approach. Most have been based on fairly unstructured impressionistic observations (e.g., Mass Observation, 1943; Cavan, 1966; Ossenberg, 1969; LeMasters, 1973; Listiak, 1974). Only in passing have any of these studies mentioned aggressive behaviour displayed by the patrons, and no study seems to have collected systematic data on this type of behaviour.

The process of escalation and the stimuli that start an escalatory cycle into a violent incident are undoubtedly best studied by an observational method. Moreover, some aspects of an interview study can be cross-validated with an observational technique, and causal insights and quantitative data relevant for the study of violence and violent crime occurrences can be gained in this way.

The discussion above has touched on the necessity to estimate and control for biases in our sampling of drinking occasions and aggressive acts. In our samples we also want to preserve as far as possible, the variations along cultural and structural variables in the theoretical universe and to make possible a replication of our study under different cultural and structural conditions.

The research methodology of the study approaches the problem of bias and missing information by attempting to eliminate the weaknesses of one method by the complementary use of other methods. It will attempt to make optimal use of different approaches through checks and biases and by providing supplementary data. This will aid in both the descriptive purpose of the study and in establishing epidemiological relationships of potential causal import.

Consequently, an intensive study of alcohol use and aggressive behaviour in one community was the approach chosen[6]. In this community an integrated approach which used three main methods of data collection was applied:

1) An interview study of the general population of the community,

2) Observations in public drinking places in the community, and

3) A study of police records on violent crimes overlapping in time with the interview study and the observational study.

In addition, a number of interviews with key informants, such as the police, waiters and representatives of welfare agencies will be carried out during the analytical stage of the project. This multi-pronged methodology is required considering 1) the weaknesses in exclusive reliance on interview surveys in sensitive areas of behaviour, such as alcohol use and aggressive behaviour, 2) the probable lack of representativeness of situations tapped by observational techniques, and 3) the biases and informational gaps present in police records.

5. Selection of study community

The criteria for selection of the community were as follows: 1) The locale should have enough variation in cultural background of the population to allow a study of cultural and normative influences on the association between alcohol use and aggression; 2) The locale should be large enough for a sufficient number of violent crimes to be committed during the study period; 3) The community chosen was to be sufficiently isolated to exclude external influences and sources of violent behaviour, for example, by non-residents visiting the community in large numbers; 4) The community had to be small enough to make observational samples sufficiently representative and to enable some checks of biases by comparison with data from the interview study; 5) For cross-cultural purposes the locale should include large enough populations of one or more ethnic groups, for which comparative data exist or for which further data can be collected to ensure refinement of hypotheses on cultural and structural influences which are relevant for explaining the connection between alcohol use and aggression.

For these methodological and other practical reasons Thunder Bay, Ontario, was chosen as the site of the study. Thunder Bay has a population of approximately 120,000. Although almost half the population (49,000) is of British descent, the community has sizeable Finnish, Ukranian and Italian minorities of about 10,000 each (Statistics Canada, 1973; Raivio, 1975). There are 7,000 individuals of French descent in Thunder Bay, 5,000 of Polish and 4,500 each of Scandinavian and German descent. Over 20% of the population in 1971 was born outside Canada and approximately 13% had immigrated after 1945. This means that some cultural variables can be refined. Thunder Bay is fairly isolated geographically from other population centres. The Finnish population, for which comparative epidemiological data exist to a larger extent than for any other group and for which a replication is planned in a community in the native country, is the largest of any locality outside Scandinavia.

6. Cross-cultural methodology

All methods of data collection and analyses based on these will hopefully be replicated for the community in Finland and compared to the results for Thunder Bay. It is planned that key informants such as police, waiters, etc., will be interviewed also in the community in Finland. Within Thunder Bay, data on effects of assimilation into the dominant culture, age at arrival to the country and length of stay of the Finnish (and other ethnic groups) in Canada on drinking and aggression will add some refinement to the analyses. The replication in Finland will probably give some insights into the effects of structural factors (laws, police enforcement, availability of drinking places, etc.) and cultural factors on the association between alcohol use and aggression, and may provide information on any effects that changes in drinking patterns have on this association.

The community chosen as a site for a possible replication is the city of Lahti. It is situated in Southern Finland and has a population of 95,000. The geographical location of this community is not the best possible from the point of view of replication; other communities would have been available which would have been geographically more isolated, and represented areas of the largest emigration to Thunder Bay. However, the size of the city is suitable, and like Thunder Bay, it has a relatively high rate of violent crime. Above all, interest has been shown by the local authorities in a study of this kind.

C. INTRODUCTION TO THE THREE MAJOR DATA COLLECTION METHODS

In the discussion below the background, an account of the methodology, a description of the field work, and some central marginal distributions of the three methods of study are presented. For the interview study, in which validity checks were possible to the largest extent, a more detailed methodological report is planned for a later date.

1. Interview Study

a. Background

Major objectives of the interview study are:

1) To provide estimates of the incidence of violent behaviour (threats and actual physical violence) in the community and in subcategories of the population during a 12 month period.

2) To analyse the relationship between characteristics of the respondent and his/her experiences of violence.

3) To provide an estimate of the incidence of violence witnessed (but not partaken in) during a 12 month period.

4) To provide prevalence estimates of the proportion of adult residents (aged 18 and over) in the community who had experienced some form of physical violence or threat since their 15th birthday.

5) To establish contextual features of the last occasion of violence. These features include: the time and place of occurrence, the characteristics of the antagonist, the reasons or causes of the incident imputed by the respondent, the extent of injuries to the respondent, and most importantly, the extent and characteristics of alcohol use, if any, by the respondent and the antagonist.

6) To provide a provisional estimate of the incidence of aggressive feelings and aggressive behaviour in alcohol use occasions, and the nature of this behaviour.

7) To analyse the relationship between attitudes towards alcohol use, attitudes towards violence and experiences of violence.

8) To provide data for a contextual analysis of alcohol use situations regarding the characteristics of participants, the location of the event and other variables related to the setting, behaviour exhibited by the participants, and to relate these to different variables of alcohol use, such as amount and type of alcohol consumed and length of the drinking occasion.

9) To provide data for a cross-cultural analysis of the incidence and prevalence of physical violence and threats, and the connection of these types of behaviour with alcohol use. In this connection general alcohol use and patterns and attitudes towards alcohol use, towards behaviour while drinking and towards violence and other resolutions of human conflicts will be established and their correlational relationship with behaviour in alcohol use situations will be studied.

It is also hoped that the information on epidemiological associations and the causal interpretations of these will be sufficiently fruitful to assist in the design of a research strategy of optimal economy, and that some findings will later be utilized in controlled settings. At the very least it is expected that the characteristics and drinking patterns of typical drinking occasions in the community and in subpopulations will aid in the planning of small group studies or experimental studies on individual subjects.

As is the case with other forms of behaviour which fall within the legal definitions of crime, incidents of interpersonal violence are greatly underrepresented in the occurrences known to the police (e.g., Fattah, 1973; Ennis, 1967; Hood and Sparks, 1970; Christie, et al., 1965; Aromaa, 1977). The estimates of the extent of the "dark figures" or different types of violent crime differ but seem substantial (see e.g., Hood and Sparks, 1970).

As mentioned earlier, the involvement of alcohol in violent incidents has been studied in a great number of jurisdictions and other geographical or administrative units, but the investigations have been almost exclusively based on occurrences known to the police or those handled through the courts. If the proportional involvement of alcohol use by the offenders and/or victims in these crimes were our only concern, and if we could assume that the incidents appearing in police records were an unbiased sample of all violent incidents within the geographical boundaries of our study, we could be content with the use of police records for many purposes. However, although crimes known to the police are generally recognized as the least unbiased available source of violent crime, they are still far from totally unbiased. It is to be expected that incidents especially within the primary group (mainly the family) and within violent subcultures or subsegments of society would be considerably underrepresented.

A comparison of the results from the interview study and the study of the occurrence reports on violent crimes known to the police will indicate to what extent the incidents known to the police are an unbiased sample of violent occurrences in the community, or, which seems more probable, along what selective variables there is bias.

Another limitation of data from police or court records is the limited and varied extent of information available on each occurrence. It is safe to assume that many variables relevant in the causal explanation of the incident have not been included in the great majority of occurrence reports. This is especially regrettable in the case of the particulars of alcohol use. It is not stated in very many occurrence reports how much alcohol was consumed, over what period of time, in what form, etc.

Finally, in records of violent incidents which have come to the attention of the police (or processed through the courts) the selection of the sample is by necessity carried out along the dependent variable, i.e., these are samples of occasions when violence occurred. This fact imposes severe restrictions for the assessment of the causal import of potential independent variables. Along the dependent variable only concordance figures, such as percentage of violent crime occurrences which were preceded by alcohol consumption by offender and/or victim, out of all occurrences can be calculated. The relative strength of the concordance between the two variables under the condition of a third (or more) variable can, however, give clues as to multivariate causal connections.

On the other hand, if we know the probability of the occurrence of the presumed dependent variable when the independent variable has occurred, i.e., if we sample along the independent variable with alcohol use situations as sampling units, we will get to know the risk of violence in drinking occasions. This type of data can also be used in systematically varying other causally relevant variables, in order to study their effect on the relationship. Thus, both absolute risks and conditional risks of occurrence of violence in (or as an outcome of) alcohol use situations can be ascertained, anologously to the establishment of absolute and relative concordance when sampling along the dependent variable.

Neither concordance nor risk measures alone or in combination suffice to establish statistical significance of the relationship, since a null hypothesis cannot be established without knowledge of the total numbers of both the occurrences of the dependent and independent variables. Let us assume that we have information e.g., over a period of 12 months on the sets of violent incidents in alcohol use conditions, violent incidents in non-alcohol conditions and alcohol use situations which were not connected with violence. In order to establish a null hypothesis and to test the statistical significance of a relationship between alcohol use situations and violent incidents, we would also have to know the number of (equivalent) occasions at which alcohol was not used and at which no violent behaviour was exhibited. Here we run into definitional and methodological problems of great magnitude.

Using concordance and risk figures we will make an attempt in later reports to calculate the strength of the association basing our calculations on estimates of time spent in drinking occasions as these are available from the interview study.

Employing the symbols A for alcohol use occasions, V for violent incident and X for a third variable of potential causal import, we can express the ideas discussed above in a more concise way. Using these symbols $\frac{N(A\cap V)}{N(V)}$[7] will stand for the proportion of violent incidents which were connected with alcohol use out of all violent incidents. If we substitute "violent incidents" by "violent crime" and multiply by 100 we get the traditional measure used in studies of police or court records of violent crimes. Since the base is the occurrence on the dependent variable, the measure is a simple concordance measure. The expression $\frac{N(A\cap V)}{N(A)}$ stands for the proportion of alcohol use occasions at which a violent incident occurred. As mentioned above, since this measure uses the presumed independent variable as its base, it is a measure of risk.

Introducing a third variable X and measuring the intersection of all three variables (or, more correctly, their positive values, i.e., when the phenomenon referred to by the variable name occurs) we get the measures $\frac{N(A\cap V\cap X)}{N(V\cap X)}$ and $\frac{N(A\cap V\cap X)}{N(A\cap X)}$ of which the first could be called "conditional concordance with respect to X" and the second "conditional risk with respect to X". If we now compare the results to the first measures, $\frac{N(A\cap V)}{N(V)}$ and $\frac{N(A\cap V)}{N(A)}$, respectively, we can see whether the occurrence of X increases or decreases the overall probability of a violent incident. This reasoning can, of course, be extended to include any number of additional variables[8].

Later we will discuss some practical compromises regarding the instruments used in the study, which will mean that many of the "third variables" are not available for a representative sample of violent incidents and alcohol use occasions. Weighting procedures will be employed to remedy this to some extent.

b. Selection of interview sample

For the interview study an ideal sample of size 1200 Thunder Bay residents, aged 18 and over was determined. Out of these, 1000 were to form a probability sample of Thunder Bay residents, and the additional 200 made up the major part of the sample of Thunder Bay residents of Finnish origin needed for the cross-cultural purposes of the study. Since a response rate of 80% was set as a realistic goal, approximately 1500 residents were to be selected as prospective respondents.

Henderson's Thunder Bay City Directory was chosen as the sampling frame. This directory is updated yearly on the basis of annual door-to-door enumeration. If total coverage were attained in the enumeration, the directory would contain the names of all Thunder Bay residents aged 18 and over at the time of enumeration. The directory contains the street addresses of all listed residents, their status in the household (head of household or other status), and, in most cases, occupation and place of employment. In addition the marital status of female residents can be deduced from the information in the directory.

It seems safe to assume that the directory does not contain information on all residents aged 18 and over, even at the time of enumeration.

The important question is whether the non-coverage is associated with any relevant bias in the selection of the units into the listing. Moreover, since the listing was about one year old at the time of the survey a substantial number of the people listed in the directory had moved during the interim period. An unbiased procedure had to be designed to substitute the individuals who had moved.

From the City Directory the respondents were selected by using lists of random numbers. Thus, the sample is basically a one-stage epsem sample (equal probability of selection, see Kish, 1965) of the part of the Thunder Bay population aged 18 and over in the fall of 1977, which is listed in the City Directory. An element of two-stage address sampling was introduced by the decision to substitute selected persons who had moved by one person in the household residing at the address at the time of interviewer contact by using a random selection procedure.

Gaps in coverage were evident from another section of the City Directory containing a listing of the addresses of households, office buildings and other business places. Between three and four per cent of the addresses were listed as "vacant" or "no return" (i.e., no information on the occupants was received during the enumeration). To safeguard against any possible bias arising from this noncoverage, a proportionate sample of addresses labelled as "vacant" and "no return" was selected randomly. There were 51 addresses selected in this way. These were visited by a research assistant, who ascertained whether there was somebody living at the address, and, if this was the case, listed all the residents at the address.

The nature of the 51 selected addresses was as follows:

	N
Vacant lot, demolished house, no such address	9
Commercial building (stores, offices, warehouses)	6
Residential building: vacant	12
Residential building: occupied	24
TOTAL	51

The 24 addresses which were occupied were included in the sample, and one person aged 18 or over was selected randomly as a prospective respondent. Since the data in the City Directory were about one year old at the time of the survey, some new developments and homes were probably missed. This would, however, not have any appreciable effect on the constitution of the sample.

A letter was sent to all the selected individuals informing them about the survey, asking for their co-operation and saying that they would receive a visit from an interviewer "within a week or so" (see Appendix 1). For substitution purposes the letters were stamped "Do not forward" and had the words "or occupant" stamped on the address label after the name of the person.

If the selected person had died, a new name was selected from the full list of Thunder Bay residents in the City Directory by using random numbers. Residents of institutions and institution-like settings such as old age homes, nursing homes, etc. were not included in the sample.

In addition to the 1) basic epsem sample based on names and 2) the supplementary sample of addresses, three special samples were selected:

3) A sample selected in the same way as the basic sample, but including only males. This sample was selected to provide an oversampling of males in the study by a proportion of 3:2. Men were oversampled, since the respondents were to serve as informants on aggressive incidents and drinking occasions, and studies of violent crime and alcohol use show that oversampling of males will give a more economical sample of these occurrences.

4) A Finnish sample selected from all individuals with a Finnish first and/or last name. This sample was selected in order to provide a large enough sample of residents of Finnish origin to supplement the estimated 90 or 100 persons of Finnish origin in the basic and male samples.

5) A Finnish male sample, selected to provide an overrepresentation of males in the Finnish sample (3:2). This sample was selected from Finnish male names in the City Directory.

c. Interviewing

The first interviewers were recruited through advertisements in the two local daily newspapers on June 8 and 9, 1977. The first prospective interviewers received their training in groups of 5 to 10 during two 2½ hour training sessions around the middle of September. The training sessions were led by the principal investigator and a research assistant together with a consultant form the Social Research Institute for Alcohol Studies in Helsinki, Finland. It was planned that this consultant would also serve as a consultant on the replication of the study in the Finnish community in order to ensure maximum comparability in the field work. The sessions were carried out with an interval of 5 days for each group of interviewers. During this interval the interviewers were instructed to carry out 2-3 interviews, which were then discussed during the second training session.

In the course of the interviewing it became apparent that more interviewers were needed than had been anticipated. Canada Manpower referred these. All in all, 41 interviewers carried out at least one interview. Eighteen of these came through advertisements, 15 through Manpower and 8 through friends who were interviewing. The interviewers were mainly students and housewives. The majority were female with only 4 males conducting interviews. The age range was between 20 and 65 with a median age of about 30 years. There were 1110 completed interviews and thus the mean number of interviews carried out by the interviewers was about 27. The median was 15 interviews. The following table shows the distribution of number of interviews conducted by the interviewers:

No of interviews completed	No of interviewers
1-10	15
11-20	11
21-30	3
31-40	7
41-50	1
51 and over	4
TOTAL	41

The interviewers were given identification cards which identified them as interviewers on "a social research project funded by Health and Welfare Canada and the Addiction Research Foundation of Ontario". A few days after the letters to prospective respondents had been mailed out the interviewers were given typed index cards with the code number of the respondents, his/her name, address and occupation or other status as stated in the Henderson City Directory. Interviewers were given the names of selected persons living in the same general area as the interviewer. However, close neighbourhoods were avoided and the interviewers were asked to return all sample cards of people they knew as friends or acquaintances, for reassignment to another interviewer.

It was stressed that the first contact with the selected person or household should be done in person. If no one was at home, the interviewers were to leave a card explaining the purpose of the visit and stating their name and phone number. It was not expected that many selected persons would phone and set a time for an interview, and scattered remarks by the interviewers showed that this was indeed very uncommon. The main purpose of the card was to establish a first contact with the selected person and in this way to facilitate the second contact by telephone or in person.

The interviewers were paid a set fee for each completed interview. There were no reimbursements for mileage or for travel time. On the other hand, the basic rate per interview was raised if the interview took place relatively far away from the area where the interviewer lived.

Difficulties in getting enough interviewers who lived in the Fort William area, however, meant that some interviewers from the Port Arthur area had to carry out most of their interviews in Fort William (for a slightly higher fee). In order to encourage the interviewers to complete as many interviews as possible an incentive scheme was developed. This consisted in raising the pay rate per interview by a fixed amount for each ten interviews completed. For the training sessions and for travel time to and from these sessions, the interviewers were paid an hourly rate. This was generally not paid out until the interviewer had completed 20 interviews.

It was originally estimated that all interviews would be completed within a period of two months during the fall of 1977. The fact that most of the interviewers could only work part-time extended the interviews over a much longer period. Also, the follow-up of original refusals, not-at-homes etc. was carried out more intensively than had originally planned. Therefore, the interview period stretched from September 16, 1977 to March 31, 1978, although over three-fourths of the interviews were carried out during a 2½ month period in the fall of 1977.

The table below shows the distribution of interviews over the fieldwork period.

	N	%	Cumulative Percentage
September, 1977	145	13.1	13.1
October, 1977	394	35.5	48.6
November, 1977	319	28.7	77.3
December, 1977	72	6.5	83.8
January, 1978	78	7.0	90.8
February, 1978	65	5.9	96.7
March, 1978	37	3.3	100.0
TOTAL	1110	100	

d. Confidentiality and other attempts at securing valid responses

In the letter which was sent to selected persons, a self-adhesive label with the name and address of the project director was enclosed. This was to be affixed to an envelope containing the completed interview schedule at the end of the interview. This procedure was meant as a means of letting the respondent check that the envelope was sealed and in this way helping the respondent to feel at ease about any sensitive information he/she had given. Also, it was intended as a means of ensuring that the interview had been carried out with the right person. The usefulness of this procedure was diminished by the fact that many of the respondents had thrown away the letter and with it the address label.

In addition to enclosing the interview schedule in an envelope stamped "CONFIDENTIAL", and sealing it in the presence of the respondent, other means were employed to ensure confidentiality[9]. All interviewers signed forms binding them to strict confidentiality with respect to all information received during the interview. There was no name or address on the interview schedule, only on the sample cards given to the interviewers. The only identification on the schedule consisted of a five digit identification number. The sample cards were returned by the interviewers and have been stored in a separate location from the completed schedules during the study.

Other means of increasing confidentiality and overcoming resistance on the part of the respondent included the use of flash cards with some central and sensitive fixed response questions. In asking these questions the interviewer only read out letters or number to which the respondent replied with a 'yes' or 'no', in other questions, answered with an alphanumerical code (see Appendix 2 for copies of the interview schedule and the set of flash cards used). In these questions the interviewer did not have the alternatives written out in the schedule. No doubt the interviewers, after conducting a number of interviews, learned the meanings of some of the codes, but the procedure probably served to reassure the respondent about the confidentiality of their answers. This was also the feeling of all the interviewers who commented on the use of flash cards. Confidentiality was also stressed in the letter sent to prospective respondents (see Appendix 1), and in the introduction when the respondent was first contacted (see Appendix 2).

The interview schedule was translated into Finnish, French and Italian. Six of the interviewers knew Finnish and 66 of the interviews were carried out in Finnish. Italian was used in 14 and French in only 4 of the interviews[10].

Other means of increasing the validity of responses to specific sets of questions included the use of a calendar to aid in the recall of the dates of the last occasions of drinking. The use of life-size drawings of drinking glasses to facilitate estimations of amounts of alcoholic beverages consumed at these occasions was contemplated, but the pretests and the early experience of interviewers showed that these made no difference to the validity of the information on amounts consumed.

The validity and reliability of responses will be examined in a number of different ways in a later methodological report, and discussed more briefly in other reports.

e. Attrition and response rates

All in all 1479 persons were selected to the sample. Of these 1110 were interviewed. There were 187 substitutions because the selected person had moved. This comprises 12.6% of the total sample . Out of the completed interviews 135 (N=1110) or 12.2% were done with substituted individuals.

A large majority of individuals who had refused on the first contact were later approached on the phone by one of five experienced interviewers who tried to set up an interview. In this way 69 additional respondents were interviewed. These respondents form 20.4% of all original refusals. The response rate of the survey was increased by 4.7% by contacting these persons anew. Some separate analyses will be carried out with this subsample for methodological purposes.

The reasons for attrition are displayed below:

	N	%	Percentage of total selected sample (N=1479)
Refusal	270	73.2	18.3
Aged	28	7.6	1.9
Sick	20	5.4	1.4
Language difficulties[11]	16	4.3	1.1
Away for duration of study	11	3.0	0.7
Incapable[11]	10	2.7	0.7
Never home, available	6	1.6	0.4
Other[11]	8	2.2	0.5
TOTAL	369	100	25.0

Table 1 in Appendix 3 shows the distribution of reasons for attrition separately for males and females. The distribution of the total selected sample,the interview sample, and all attrition cases by sex is shown in Table 2. The sex distributions of the final refusals (which form 73.2% of all attrition cases), and the reconsidered refusals (which make up 6.2% of the completed interviews) are also shown in this table.

As mentioned earlier, the interviewers were instructed to make the first contact in person, but it was left to their discretion whether the next contact or contacts were made in person or by phoning the selected person[12]. It was not feasible to keep track of all telephone contacts or attempts at telephone contact for the completed interviews. Consequently, Table 3 in Appendix 3 only shows the distribution of number of personal calls by the interviewer before an interview was obtained. It was originally planned that housecalls would be limited to three call backs, but in some cases, especially when the selected person lived in a convenient location, more housecalls were made. Table 4 shows the number of housecalls made to all attrition cases, final refusals and reconsidered refusals and Table 5 displays the distribution by total number of attempts at contacting (in person and by telephone) the same subsamples of selected persons. Finally, Table 6 shows the number of different interviewers who tried to contact the original attrition cases.

The interviewers were not asked to collect data on the reasons given for refusals systematically. However, this information was ascertained in sufficiently many cases to provide data for tentative analyses of some methodological interest. Table 7 in Appendix 3 shows that 46% of the 69 reconsidered refusals were such that the selected respondent did not provide a reason for the original refusal or, if provided, this was not recorded by the interviewer. For the persistent refusal this was true in 41% of 270 cases. It should be noted that some of the respondents gave more than one reason so that percentages will add up to more than 100. We will not go into this analysis in any detail here. Suffice it to note that that being "too busy", "not interested" and a stalling tactic (postponing decisions, asking the interviewer to contact later, breaking appointments made for interview etc.) were the three most common responses of people who refused.

The overall unweighted response rate for the survey was 75.1%. The response rate differed between the sexes. Women had a rate of 78.0% (496/636) and men 72.8% (614/843). In the presentation of results women respondents will be weighted with a factor of 1.1 to make the sample correspond to the Thunder Bay population aged 18 and over. The proportions in the population are 49.94% men and 50.06% women (Statistics Canada, 1978). Taking into account the oversampling of males, the corrected response rate for the study is 75.4%.

The basic sample and the extra sample of respondents of Finnish origin also differed in the response rates. Leaving out the oversampled males, the Finnish sample had a response rate of 80.4% (156/194) and the basic sample 74.7% (700/940). Both of these subsamples were self-weighting as to sex distribution. The extra males sampled brought down the overall response rates; the extra males in the basic sample had a rate of 72.4% (178/246) and those in the Finnish sample 75.0% (36/48).

The unweighted response rates by sections of the city are shown in Table 8 of Appendix 3. A map of Thunder Bay displaying the sections as used in the study is shown in Appendix 4[13]. Table 8 shows that the response rates vary between 65% and 78% with the core downtown area of Port Arthur (area 1), and Fort William's East End (area 7) having the lowest response rates. The Fort William East End, a relatively poor working class area (Statistics Canada, 1978), with a response rate of 65% had a very high rate of persistent refusals (28%). The downtown core of Port Arthur on the other hand with the second lowest response rate of 69% showed a much larger variation in the causes of attrition. Further differences in rates of attrition will be discussed in a later report to the extent that they may affect the results of the study.

f. Representativeness on central demographic variables of interviewed sample

A comparison with the distributions for the total Thunder Bay population on some central background variables available in the 1971 and 1976 census will show the extent to which the sample is representative of the Thunder Bay population on these variables. The comparisons are made including the oversampling of males and using the same weighting factor of 1.1 for females as will be used throughout the study. The extra sample of Finnish respondents was left out of these comparisons for obvious reasons. It thus consists of the subsample which is aimed at being representative of the Thunder Bay population (unweighted N=933), and through the weighting it is made representative in its sex distribution (weighted N=979). This sample will be referred to as the "General Sample" in this report.

Table 9 shows the comparison between the sex and age distribution of the interviewed sample and the Thunder Bay population as reflected in the Census of 1976. The correspondence is fairly good, except for an underrepresentation of the youngest and the oldest residents. The underrepresentation of 18-19 year old respondents is largely explained by the fact that the sample listing used was one year old at the time of the survey. The low representation of the oldest residents is explained by the decision to leave out residents or nursing homes, and old age homes from the sampling frame. For all intents and purposes, it can be said that the general sample is representative of the Thunder Bay population aged between 20 and 69 if the youngest and the oldest sample units are left out. An attempted exclusion of these, did not, however, alter the total results in several key distributions and estimates, and consequently these subgroups will be included in the analyses of the interview study.

Census data for household income were not available for the Census of 1976, and the data from the 1971 Census could not be used because of inflation and resultant changes in the income structure. On the other hand, the distribution of the population aged 15 and over according to education was available for 1976 and this is shown in Table 10. It is obvious that residents who had relatively few years of education are underrepresented to some degree. Two factors probably explain most of this discrepancy. Firstly, the Census data pertain to the population aged 15 and over (who were not attending school full-time), while the general Thunder Bay sample for all practical purposes is limited to those aged 20 and over. Secondly, the oldest and formally least educated residents are underrepresented because of the selection procedures which left out residents in nursing homes and old-age homes. Taking this into account, the sample distribution is probably roughly similar to the corresponding distribution in the Thunder Bay population, although caution is necessary since the categories in Table 10 are rather crude due to necessary collapsing.

It was also possible to compare the general sample with Census data on the distribution of major occupational categories. The overrepresentation of residents with higher education is reflected in Table 11 in that the occupations requiring a higher education are overrepresented in the general sample. Construction workers and those working in processing (flour and grain milling, wood processing, pulp and paper making etc,) are also overrepresented, whereas service and clerical occupations and occupations in transport and other industries are underrepresented. These fluctuations are partly due to random sampling fluctuations, to a lesser extent perhaps to non-coverage in the sample listing (the City Directory). Difficulties in exactly matching the occupational classification of the Census in the survey data and differential non-response can also partly explain the discrepancies. With regard to the latter it is worth recalling that relatively poor working class areas tended to have a lower response rate. Experiences during the fieldwork showed that some bush workers only came home for (some) weekends and this created difficulties in arranging interviews. This would to some extent explain the underrepresentation in the category which includes forestry workers.

In summary, it seems that the weighted general sample is representative of the Thunder Bay population between the ages of 20 and 69 as to age, but that people with high education and professional and managerial occupations are overrepresented. It is very likely that individuals with high incomes are also overrepresented, although Census data were not available for a direct comparison.

g. Weighting the subsample of substituted persons

The 135 substitutions in the sample were selected by two-stage sampling. These units differed in their probability of inclusion from the rest of the sample. Since only one member of each of these households was included in the sample, the probability of selection is the inverse of the number of eligible (aged 18 and over) members of the household. This bias is easily corrected by weighting the responses of the units by the number of eligible household members (Kish, 1965). A common procedure in this type of sample is to weight the responses, and compare the weighted distributions on some central variables to the unweighted distributions for the same variables. If the distributions do not differ sufficiently, the weighting procedure is abandoned and the unweighted data used in the analyses. Since the cases subject to weighting in this study form only about 12% of all sample units, the differences would have to be considerable to justify the extra complexity introduced by this weighting.

Weighting procedures were carried out for a large number of central variables in the substituted subsample of this study. The weighting tended to give higher estimates of experiences of violence and threats and of alcohol use. Thus, the weighting in this subsample produced an estimate of 16.3% who had experienced physical violence during the preceding 12 months compared to the unweighted estimate of 12.7%. For verbal threats of physical violence and threats with weapons or objects, the weighted estimates were 7.1% and 11.7% respectively as compared to the unweighted estimates of 5.2% and 10.6%. With regard to alcohol use in this subsample of substitutions the weighting produced 9.0% abstainers and 21.8% respondents who had not consumed alcohol during the 30 days immediately preceding the interview whereas the unweighted data showed percentages of 11.9 and 23.7 respectively. Conversely, the estimate of individuals who drank at least once a day was 6.4% in the weighted and 5.2% in the unweighted data. The largest of these differences will affect the sample estimate (population estimate) by about 0.5 percentage points. The greatest effect corresponds to an increase of about 5% in the estimates of the proportion of individuals who experienced physical violence in the 12 months preceding the interview and a decrease of the same size in the estimate of the proportion of abstainers in the population.

Weighting did not have any systematic effect on the distribution of central background variables and the effect on responses to attitude items was minimal. Comparisons between the unweighted distributions of the sample cases included through substitutions and the rest of the total study sample reflected the same lack of essential differences, except that the substitutes were considerably younger than the rest of the sample. This is no doubt due to the greater geographical mobility of young people.

Taking all this into consideration it was decided that the substituted sample units would be included in the analyses without weighting.

h. Mailed questionnaire to attrition cases

As a last attempt to increase the response rate, and also in order to provide some data for tentative methodological analyses on the possible biasing effect of non-response, a short questionnaire containing most of the central questions of the survey was sent to 295 of the 369 attrition cases, including 257 of the 270 refusals and 38 of the other 99 attrition cases (see Table 12). A copy of this questionnaire and the accompanying letter is shown in Appendix 5.

Altogether 82 questionnaires were returned. Eleven of these were, however, filled out by a person of the wrong sex and were therefore deleted from the analyses (Table 12)[14]. The remaining 71 cases form 24% of all questionnaires mailed. By including these cases in the sample the unweighted response rate of the survey increases to 79.9%, 78.1% for men and 82.1% for women. The results presented in Table 12 show that out of the 71 acceptable returns to the questionnaire 65 were persistent refusals in the interview study, two were categorized as aged, and one each categorized among the "sick","language difficulties", "incapable" and "other reasons". The questionnaire was sent to 182 male attrition cases (85.0% of male attrition cases) and 104 female attrition cases (79.4%). Due to the lopsided sex distribution of the attrition cases the sex distribution of this mail sample is skewed in favour of males. There are 46 males and 25 females in the sample. The return rates did not differ between the sexes.

Table 13 shows the breakdown in return rates by section of city. The subsamples are too small to justify any emphasis on the differences in returns. There seems to be a tendency, however, for the returns to be lowest in the downtown areas and highest in the suburban or semirural areas within the city limits.

The results of Table 14 do not show any great differences in likelihood of return by reasons for refusal. The only notable difference is that selected persons who did not give a reason for refusal (or for whom the interview did not record a reason) tended to be less likely to return a mailed questionnaire. The number of reasons given per individual was slightly higher among the non-returns (2.9) than among the ones who filled out the questionnaire

(1.8). If the non-returns had received more housecalls or other contacts than the returns this would explain the finding. This is not the case, however, since calculations show that both subgroups received a mean of 1.5 housecalls, and non-returns received 1.3 and the returns 1.2 phonecalls on the average. It thus seems more plausible that the respondents to the mailed questionnaire were a relatively untapped reservoir of respondents to the personal interview, not in the sense of having received fewer housecalls and phonecalls, but in that the interviewer did not persevere in trying to get these selected persons to agree to an interview. Due to this lack of perseverance, a reason for the refusal was not elicited from the selected person. Thus, the returns to the mailed questionnaire consisted of individuals who would have been more likely to have responded to the personal interview than the non-returns. If this interpretation is correct, the mailed questionnaires are a biased sample of the attrition cases (consisting mainly of refusals) at least on this variable, and generalizations to the rest of the attrition cases (refusals) are perhaps not warranted. The extent of this possible bias will be examined in the methodological report referred to earlier.

Since the main purpose of the questionnaire sample is to indicate any biases introduced by noncoverage due to attrition from the selected sample a few preliminary findings will be presented here in a summary fashion. The comparisons will be made with the total unweighted sample (N=1110) of the study . In the methodological report and other substantive reports, controls and weighting will provide more reliable comparisons. Preliminary comparisons on some central statistics are shown in the following table.

	Mail Sample (N=71)	Interview Sample (N=1110)
Percent experiencing physical violence in past 12 months	11.8	10.3
Percent experiencing threat with weapon/ object in past 12 months	2.9	2.8
Percent experiencing verbal threats of physical violence in past 12 months	10.1	7.2
Percent abstainers	8.5	10.9

The slight trend in the differences in these statistics can be explained largely by the higher proportion of male respondents in the mail sample, - 63% versus 55% in the total unweighted interview sample. The small size of the mail sample would, of course, account for even larger differences between the samples. These results are shown mainly to indicate that at least part of the non-response probably did not lead to any great bias on central variables.

The responses to the mailed questionnaires will not be included in the main body of analyses. Instead, they will be footnoted in future reports, if they differ significantly from the results of the personal interviews.

i. The interview situation

The mean duration of interviews was 57.6 minutes with the median being 55.4 minutes. The time ranged from 10 minutes to 2 hours. The distribution of length of interview is shown in Table 15. Since many of the questions did not apply to abstainers and people who had not experienced any violence or threats since the age of 15, most of the interviews with these were much shorter than the average. The distribution of interviews over the the days of the week is shown in Table 16, and the distribution over hours of day in Table 17.

Information about the circumstances of the interview was recorded on a separate form by the interviewer after the interview. A copy of this form can be found in Appendix 2.

It was shown above that 16 cases of attrition were due to language difficulties. In most cases of language difficulties encountered during the study, an interviewer could be found who spoke the language. In a few cases a member of the family translated the questions - not a desirable procedure considering the sensitive nature of some questions. Most frequently, however, even though there were language difficulties the respondent knew enough English to complete the interview without outside help. According to the assessment of the interviewers, 91.3% of the respondents had no language difficulties, 7.0% had some, and 1.7% had a great deal of difficulties.

In the training of the interviewers it was emphasized that interviews should be conducted in private if at all possible, and with as little outside interference as possible. In order to get an indication of the privacy of the interviews, the interviewers also recorded whether other people were present in the interview situation and rated the effect that this had on the responses. Another person was present at one time or another in 45.1% of the interviews, an unexpected high proportion. The "Total" column in Table 18 shows that somebody else was present during the whole interview in 18.2% of the interviews. The corresponding column in Table 19 indicates that in the large majority of these interviews, the presence did not have an effect on the responses given.

According to the assessment of the interviewers the presence of an "outsider" had any effect at all on the responses of 21.1% of these interviews (9.1% of all interviews), and had affected the responses a great deal in only 0.8% (0.4% of all interviews). In many cases the other person was a small child whose influence on the interview consisted in interrupting the interview and distracting the respondent. Unfortunately, the age of the other person present and his or her relationship to the respondent was not recorded. Inferential measures will be used to get around this in a later assessment.

Inspection of Table 18 indicates that in the cases of language difficulties the presence of another person was needed for translation of the questions since the probability of this presence was greater than in other interviews. This was assessed as having had some effect on the responses in 29 of the interviews, or 44% of the cases of language difficulties in which somebody else was present. Not surprisingly, the presence of another person in the interview situation was more likely to be judged as having had an effect the longer this person (these persons) was present (Table 20).

In order to study factors which might have an effect on the validity of responses to questions relating to the most central and sensitive areas of the study, in particular the central dependent and independent variables of aggression and alcohol use, the interviewers were asked to assess whether the respondent "hesitated" to answer questions on violence and on alcohol use (see Appendix 2)[15]. The interviewers reported that there was at least some hesitation in 6.3% of the interviews in response to the questions on alcohol use and in 9.7% in response to the questions on experiences of violence. Table 21 shows that, as judged by the interviewers, there was hesitation in 11.1% of the interviews in which the interviewer was alone with the respondent, in 15.3% of the interviews when somebody else was present during part of the interview, and in 13.6% of the interviews at which somebody else was present all the time. The differences are thus not very large and not linearly related to the extent of presence of the other person(s). This could, of course, be more a reflection of the degree of usefulness of such a question or its wording than a reassurance of valid responses to these key questions.

The relationships between the presence of one or more other persons on some central statistics of the survey can also be ascertained more objectively. Table 22a and 22b show the results of such an analysis in the total sample of 1110 interviews. The results do not show any clear relationships of drinking characteristics with presence of other people in the interview situation. There definitely is no tendency for respondents who were alone with the interviewer during the whole interview to report more drinking than those who were not alone with the interviewer. The same is true for experiences of threats or violence. If anything, there is a slight tendency in the opposite direction. Especially in the interviewsin which somebody else was present part of the time, the reported drinking and experiences of aggression were comparatively high.

The lack of a tendency towards linearity in these results suggest other, third variable, explanations[16]. These explanations could be related to the probability of the respondent living alone, and thus a much reduced likelihood for having somebody else present at the interview. They probably also are related to the probability of having small children in the household who would be present at the interview. These two factors are related to age and sex of the respondent, both factors which have a profound influence on the likelihood of experiencing violence and alcohol consumption. We are not dealing with a one-dimensional variable and the results presented in the table leave the question of the effect of other people's presence on responses to the sensitive main variables of the study largely unresolved. Some further analyses will be carried out which may shed some light on the relative contributions of the factors mentioned above and other factors on these central variables.

In view of the above findings it should be pointed out that some systematic evidence from alcohol surveys suggests that the presence of e.g., the spouse can have its positive sides in remembering dates of certain events, amounts consumed, company at drinking occasion, etc. It is also possible that deliberate underreporting or shading of responses is less likely in the presence of a third person who knows the "true story". The greatest influence of a third person may perhaps not be felt in factual questions, but in responses to attitude statements, reasons for drinking etc., where truth conditions are more vague[17]. For some analytical purposes this may not even be regrettable. This is true if responses to these types of items is meant to reflect decision making and behaviour tendencies in real life situations. Here we are up against the atomistic ideals of survey research which may conflict with social reality. However, if a study is aimed at eliciting samples of real life events in decision making, this should be done systematically. This is not the case for this study.

Tables 23a and 23b indicate that there was not much difference in central drinking characteristics and experiences of aggression between those respondents whose responses were judged by the interviewers to have been affected by the presence of a third person (or more) and those whose responses were judged not to be affected by this. Again, there are no clear-cut tendencies discernable, and the differences are relatively small. Table 24a, 24b and 25 show the results of another assessment by the interviewers. Once more, the results are not in the expected direction. Caution is needed in assessing the meaning of these results, due to the small number of interviews for which hesitation was detected by the interviewer. As mentioned above, the results probably reflect as much on the usefulness of this type of assessment as on any substantive hypotheses.

j. Limitations of instruments used in interview study

A very important question for any survey is, whether the information on behaviour gained through the instruments used is an unbiased sample of the universe. Due to a number of factors it is to be expected that this is not so in the present survey (see e.g., Pernanen, 1974, for a discussion of factors related to selective under-reporting). The extent to which the resulting subsamples of individuals, violent incidents and drinking occasions are unbiased cannot be ascertained directly by any means available in this study. In general, checks on the representativeness of sample units is much easier to accomplish than checks of events. Consequently, checks of sample units on background variables are generally seen as indirect reliability checks of samples of behaviour and events as they occur in the sampling universe. Above, we have used this procedure in comparing the general sample of the study with census data of the universe. In the planned methodological report we will make attempts to check samples of reported events as well as sample units. The means for doing this will include comparisons with refusals who reconsidered, attrition cases who responded to the mailed questionnaire, call-back analysis etc. The null hypothesis in these comparisons is that the general sample of the interview study does not differ from attrition cases and subsamples which were harder to cover. Tentative checks of samples of events as well as sample units are also possible for some specific potential biasing variables, as was demonstrated in the previous section.

All these partial checks of samples of events are indirect in nature. The coverage of behaviour and behavioural attributes cannot be checked directly and thus the coverage of both alcohol use and experiences of violence will largely remain of unknown representativeness. Considering that both are stigmatized behaviour to some degree or in some forms, one can assume that the coverage is less than perfect. On the aggregate level comparisons of reported alcohol use to sales statistics for the outlets in the city of Thunder Bay, would be possible, but this is not possible on the individual level, and not possible at all for aggressive incidents.

If our aim would be to exclusively study relationships between variables the above condition of unbiased reporting would be enough to ensure valid findings. However, for purposes of establishing incidence and prevalence estimates of a condition or behaviour, this criterion does not suffice. Here we would require total coverage of the behaviour or events under study for all the sample units.

Whatever the shortcomings of the interview method, it has distinct advantages over an exclusive analysis of administrative records collected along the dependent variable as in the case in studies of police records and court records. Sampling along the independent variable with an attendant increase in the power and practicality of analyses, a more complete and potentially less biased sample of incidents of physical violence and more extensive information on factors of potential causal value independently of administrative availability, are the main advantages.

We will now turn to a brief consideration of the effects of the measures used in the study on the representativeness of the sample of violent incidents and drinking occasions obtained, as it reflects violence and drinking in the community. This, of course, rests heavily on the representativeness of the sampling units, but there are additional methodological considerations of some import for the results of the study.

k. Samples of drinking occasions

The optimal sample of drinking occasions would of course be a sample unbiased on any variable. This means that each drinking occasion in the sampling universe should have an equal probability, or, if weighting procedures can be used, at least a known probability of inclusion in the sample. The best way of achieving this is to take a probability sample of drinking occasions within a predetermined reference period. (This objective has been met in the observational part of this project). In recent Finnish national surveys on alcohol use, this has been done by covering (at least) one week's drinking occasions in the interview (see Mäkelä, 1971; Simpura, 1978)[18]. Such a procedure was also contemplated for this study, but practical considerations coupled with higher priorities of other aspects of the study weighed the scale against such an approach. Instead, we elected to ask about the respondents' alcohol consumption and other behaviour at three separate drinking occasions. In order to vary these occasions systematically along central situational/contextual variables, only one occasion for each of three different types of context was singled out as a unit of study:

1) The last drinking occasion in the respondent's own home or somebody else's home.

2) The last drinking occasion in a licensed drinking establishment. These include bars, taverns, restaurants, private or semi-private clubs, i.e.

any place where alcohol is sold by the drink.

3) The drinking occasion during the last 30 days, or for infrequent drinkers, the last 12 months, at which the respondent had consumed more alcohol than on any other occasion during the same period. (In some cases this occasion was the same as the one in 1 or 2 above).

The differences between drinking events in somebody's home and in a drinking establishment include variations in many contextual and other types of variables. This probably results in concomitant variation in behaviour. According to a survey carried out in 1969, drinking in a home setting comprises about 83% and drinking in a drinking establishment about 12% of drinking occasions in Ontario[19]. Thus, about 95% of occasions will be covered by asking about these two contexts. If only the last occasion had been asked about, we would have had home occasions and occasions in public drinking places available for our analyses in the proportion of 7 to 1. The sample sizes of these occasions would have been about 780 and 110 occasions respectively. The latter number would not have been sufficient for the analyses planned. In addition, a large proportion of these occasions would cover drinking of comparatively small amounts of alcohol, especially those in a home. In order to make possible analyses of occasions with higher levels of consumption, the third type of occasion was included as an analytical unit.

As things stand, we will not have a random sample of drinking occasions at our disposal, only a probability sample of drinkers. The drinking occasions in our sample will be heavily weighted in favour of the ones in which relatively infrequent drinkers participated, since these drinkers will be represented in the sample by as many drinking occasions as will frequent drinkers. By making some additional assumptions and by weighting for frequency of alcohol use, we will be able to regard the sample of occasions as a probability sample of drinking occasions in the community. In this way we will arrive at incidence and prevalence estimates using drinking occasions as a base[20].

The questions on the three types of occasions provide us with data on the contextual characteristics of these drinking occasions, and the type of behaviour exhibited, aggressive behaviour in particular (see Appendix 2). In addition, questions on typical frequency of drinking and number of days during which alcohol was consumed in the month or year preceding the interview, will provide data on long-term patterns of drinking and bases for incidence and prevalence estimates.

1. Samples of aggressive incidents

Estimates of the incidence of physical violence and threats are arrived at by taking the last 12 months as the unit in a time sample. This provides direct incidence and prevalence estimates without any need for additional assumptions and weighting procedures. Incidence and prevalence of having witnessed physical violence in the preceding 12 month period, and prevalence of physical violence since the age of 15 are also available through unbiased samples. Information about the circumstances of violent incidents, however, has the same type of limitations as the information on the presumed independent variable, since it is limited to the last occasion. The reasons are again practical: forgetting would probably have made data on other than the latest violent incident very unreliable, and the interview schedule would have become too long and complicated, if total coverage of contextual features had been attempted. Moreover, clustering of violent events to relatively few individuals through a time sample would have had a narrowing effect on the theoretical significance of the contextual analysis of violent events.

It would, perhaps, have been possible to ask for details on all incidents on violence (and threats) during the last 12 months, since it seemed that respondents remembered details about incidents as far back as the year 1915. Table 26 shows the distribution in the sample of the period into which the last incident of physical violence, threat with weapon or object, and verbal threat of physical violence fell. The reason for including aggressive incidents over such a long time period was simply to get a sample of these of adequate size, and it was assumed that the last event experienced by the respondent would generally be better remembered than any other incident. The other alternative considered was to ask questions on contextual information for all of these aggressive incidents over the last 12 months. In this case the sample of events and contexts would have been self-weighting. In this case we would have had a sample of 307 incidents experienced by 100 individuals, instead of a sample of 505 incidents experienced by as many individuals. In terms of simple accounting of physical violence and threats this would have been preferable. On the other hand, there were both practical and theoretical shortcomings to such a procedure. As can be ascertained from Table 27, the distribution of frequencies of these incidents is very skewed with some respondents reporting a great many incidents for the 12 month period. The practicality of asking a respondent for details of sixty different incidents of physical violence seems very small indeed[21]. The fact that the sample would be limited to 100 individuals instead of the 505 cases now available would limit the theoretical usefulness of the data.

The sample of these aggressive events was limited to serious (i.e. not playful) acts and no physical contacts which was part of games or sports was included. In order to exclude events which were part of disciplining the respondent as a child, only events experienced after the age of 15 were asked for. Child abuse and the role of alcohol in child abuse is a serious problem but the methodological approach of the study is not well suited for eliciting reliable information on these violent incidents. Violent events in which the other person was under the age of twelve were also excluded for the same type of reasons. War time experiences were also left out of the sample of events, since the dynamics andetiology of these differ greatly from other more spontaneous forms of aggression.

Since details were asked only for the last incidents of physical violence, and threats not accompanied by physical aggression, we do not have contextual information on a number of the units which form the basis for incidence estimates over the last 12 months. The extent of this noncoverage can be ascertained from Table 27. From the data in the table we can calculate that contextual data are available for 100 of the 307 incidents of violence. These form the basis for our incidence calculations. Contextual data are also available for 29 of the 85 incidents of threat with weapon or object and 72 of the 190 incidents with verbal threat of physical violence[22]. Again, we have to make some additional assumptions in order to arrive at incidence figures for the contextual features of events of violence and threats encountered by residents in the community.

Incidence and prevalence estimates are also possible for events of physical violence witnessed by the respondent during the preceding 12 months and for the last drinking event in a licensed establishment. In addition, the frequency of the respondent's "getting angry" at the three types of drinking occasions and any consequent aggressive behaviour have been documented. This information was asked for the purpose of establishing provisional estimates of risk of aggressive behaviour in alcohol use events. Finally, as a parallel to the type of data available in police and court records, information on alcohol use by the respondent and the antagonist is available for last events of physical violence and threat encountered by the respondent.

Situations when threats were directed at the respondent but when no actual physical violence occurred, were included in order to obtain indications of contextual features or strategies which decrease the likelihood of physical violence in an aggressive confrontation. The last situation in which the respondent was "really angry" was included so that typical reactions in anger could be ascertained. In particular, it was felt that a comparison of reactions while either or both of the antagonists were drinking could give important clues to causally relevant conditional variables.

m. The sample of Finnish respondents

As mentioned above, the selection criteria for the sample of community residents of Finnish origin differ between the basic sample and the additional Finnish samples. In the former, the selection is basically unbiased to the extent that the selection of the total basic sample is unbiased. In the additional samples, on the other hand, selection was based on Finnish last name and/or first name. It was expected that this would probably discriminate more against women of Finnish descent and their children of whom a certain proportion have had their last name changed through marriage. There would probably also be a certain bias against less recent immigrants and their descendants, since they will be more likely to have (or use) non-Finnish first names and to have an anglicized last name.

On the other hand, it is probable that some women would have been included, who are not of Finnish descent but who have married a man with a Finnish last name had the same selection criteria been used for men and women. In order to counteract this, special criteria were set up for the selection of women who were or had been married.

The final criteria for selection into the Finnish sample have been set out in the flow chart in Appendix 6. It shows that to be included in the Finnish sample respondents had to fulfill at least one of the following criteria:

1) respondent was born in Finland
2) respondent's mother was born in Finland
3) respondent's father was born in Finland
4) respondent had Finnish first name or (applying only to males and never married females) respondent had Finnish last name

By leaving out the last criterion in selecting women who were married or had been married, those who had married a person of Finnish origin were excluded from the sample. In addition to the biases mentioned above, the selection procedure also discriminates against individuals whose grandparents or earlier generations emigrated from Finland and who have neither Finnish first names or last names. It was felt, however, that the size of the sample would not allow such fine breakdowns as to cultural influence, and that within the sample size the possible Finnish cultural influence on the variables of interest in our study would not be detectable.

It was not expected that any of these biases would be of great consequence for the results. By comparing the names of individuals who were selected into the final Finnish sample on the basis of their own or their parents' birthplace only, i.e., those who were of Finnish descent but neither of whose names were Finnish, with those who were selected into the sample primarily on the basis of name, the extent of potential bias can be assessed. The former could only have been selected as part of the basic samples of Thunder Bay residents.

Altogether 262 respondents were included in the Finnish sample by using these criteria. Out of these 85 came from the basic samples (and are thus also included in the general sample of Thunder Bay residents) and 177 via the additional samples based on Finnish names. The following table shows the distribution of ethnicity of first and last name in the sample of Finnish residents:

	N	%
Finnish first and last name	128	48.9
Finnish last name only	87	33.2
Finnish first name only	25	9.5
Neither Finnish first name nor last name	22	8.4
Total	262	100

Of the 85 respondents who were not selected on the basis of name, 22 or 26% had neither Finnish first name nor last name and were thus included in the sample of Finnish residents only on the basis of their own or their parents' birthplace. This percentage can thus be seen as a minimum estimate of the proportion of residents of Finnish origin who were left out of the sampling frame in the selection of Finnish residents on the basis of name (N=177). In the total sample of Finnish residents (N=262) the estimate of noncoverage based on this figure is 18%. Due to the factors discussed above it is to be expected that this noncoverage largely pertains to descendants in the third and higher generations.

On the basis of two different estimation procedures, it seems that the number of women of Finnish descent who were "inappropriately" excluded due to the stricter criteria of selection of ever married women was approximately twelve[23]

Since the main objective of the analysis of the sample of Finnish residents is not to arrive at aggregate estimates generalizable to the total population of Finnish origin in Thunder Bay, but to assess the effects of cultural factors and assimilitation on aggressive encounters especially those related to alcohol, the sources of noncoverage discussed above do not in all probability have any serious consequences. The most serious consequence for the analyses is the fact that the selection procedure has yielded a relatively small number of sample cases whose Finnish origin goes back three or more generations. Within the sample size available, this additional restriction on possible analyses is not of great consequence.

The following distribution shows the generation which was born in Finland in the final sample of Finnish residents:

	N	%
Respondent	153	58.4
Both parents	62	23.7
Father only	22	8.4
Mother only	6	2.3
Earlier generation	19	7.3
Total	262	100

Table 28 shows the distribution of area of origin in Finland among respondents born in Finland, and among mothers and fathers of respondents born in Canada. Excluded from this table are those nineteen respondents whose Finnish ancestry goes beyond their parents' generation and those respondents who did not know their area of origin. It is clear that most respondents have their origins in the areas of traditionally high emigration to North America in Western Finland, especially Ostrobothnia (Kero, 1976). This is an area which through several decades has had the lowest per capita consumption of alcohol in Finland. The per capita consumption in 1976 (2.07 litres of absolute alcohol) was only 44% of the national average (ALKO, 1977). Nyberg (1969) also cites figures which show that the proportion of residents in Ostrobothnia (our area 1) who had the then required purchase permit of alcohol in 1960 was clearly lower than in any other part of the country. Calculations show that the number of drunkenness arrests per 100 litres of absolute alcohol consumed is 0.9 which is equal to the national average. This statistic ranges between 0.7 and 1.6 in the other areas of the country. Despite a cultural reputation of excessively violent behaviour since at least the nineteenth century, this area does not now seem to exhibit higher rates of reported violent crime than other areas of Finland[24].

Of the respondents who were born in Finland, 40% immigrated to Canada before 1955 and 60% in 1955 or after. There is thus room for some refinement on the variable of length of exposure to acculturation. An index of acculturation (independent of drinking behaviour) will be built from item questions on subscriptions to Finnish newspapers or magazines, eating of typically Finnish food, number of visits to Finland, membership in Finnish organizations, knowledge of Finnish and/or English etc. (see Appendix 2, questions No. 114, 115, 118-124). The main cross-cultural analyses of data collected in Thunder Bay will compare the sample of respondents born in Finland with respondents of Finnish origin who were born in Canada, and respondents of non-Finnish origin who were born in Canada.

2. Observational Study in Public Drinking Places

As surprising as it may seem, no systematic study of general behaviour in natural drinking groups has been carried out, although many theories try to explain behaviour under the influence of alcohol, or in alcohol use situations.

Experimental and quasi experimental studies have addressed themselves to the testing of specific hypotheses about alcohol's effects on the criterion behaviour. Observational studies in natural settings, on the other hand, have studied behaviour in general, but in a very unsystematic fashion. To the extent that there has been any mention of aggressive behaviour or physical violence in these observational studies, it has been anecdotal or done in passing (e.g., Cavan, 1966; Listiak, 1974).

Partly due to the difficulties of classification and recording, no doubt, more systematic studies have, in the ways mentioned above, used summary measures related to behaviour such as attitude questions, mood scales, projective tests etc., or other narrow classifications designed to test very specific hypotheses. The studies which have focussed on the total range behaviour have done so in a rather impressionistic and unsystematic manner.

To get away from a reliance on hunches as to the prevalence of behaviour in drinking occasions, it would seem that systematic "ethological" observations of all behaviour should be carried out in natural drinking settings. This would form a middle ground between experimental studies, narrow observational studies of consumption characteristics, and impressionistic studies of general behaviour. It would also probably lead to further developments of theory and empirical research.

In this study we look at "drunken comportment" in the way anthropologists or ethologists mainly do. The criteria for classifying behaviour are essentially the same as the man in the street uses. These types of criteria are largely used in most unstructured, and also in many structured, observational studies, although the scope for including behaviour is much wider in our study. The classification of behaviour by the interactors (and the observers in our study) largely determine their reactions, and are thus causally at least as relevant as the deeper motivations which may be extracted through projective or other means. This surface level is also the level at which behaviour and interaction is recorded in the reports on violent incidents that come to the attention of the police, etc. Undoubtedly, there are subcultural differences in cognitive classification and interpretation of behaviour but no study to date has taken this into account in direct classification of actions. These differences have only been introduced as the basis of interpretations of behavioural discrepancies.

Although activities and changes in activities have been recorded in this study very inclusively, the main focus has been on emotional behaviour, both aggressive and affectionate.

a. Objectives

The reasons for including an observational study in public drinking places into this project were manifold:

1. To study emotional behaviour and interaction - both aggressive and affectionate - in a natural setting and to relate it to alcohol consumption and other variables of possible causal significance.

2. To form one base in the methodological triangulation, and tie in with information received from the interview study and the study of police reports on occurrences of violent crime.

3. To provide first hand accounts of physical violence and aggressive behaviour in connection with alcohol use.

4. To provide an in-depth study of "trouble spots" where the likelihood of violence was great according to a rating by police supervisors of the Thunder Bay Police Force.

In addition, the study will provide more incidental data on among other things:

1. The prevalence and incidence of certain types of behaviour in public drinking places.
2. The occupancy rates of public drinking places by weekday and hour of day.
3. The amounts and types of beverage consumed, drinking speed and other characteristics of alcohol consumption in the taverns.
4. Demographic and other characteristics of the patrons in different types of public drinking places and their behaviour in these.

b. Selection of samples

Because of independent fluctuations 1) in occupancy rates and behaviour over time of day and day of week and 2) in the characteristics of drinking establishments, sampling for the observational study of drinking establishments had to take into account the conjunction of these two sampling universes:

1. The place of drinking
2. The time of drinking.

Let us first consider the universe of place of drinking. All establishments where alcoholic beverages are sold by the drink for consumption on the premises form the "ideal universe" for the study. However, due to practical considerations this universe had to be narrowed down. First of all, it was decided that only public drinking places be included in the sampling frame, because of the uncertainties involved in getting access to private or semi-private clubs and the ethical controversies involved in observing behaviour in such settings. Secondly, practical necessities forced us to exclude licensed restaurants, where the principal objective of a majority of patrons was to eat a meal, and drinking was secondary to their stay in the establishment and to the role of the establishment in the life of the community or neighbourhood. Preliminary observations in some restaurants in Thunder Bay showed that observation in these would not yield the desired type of data in any way commensurate to the expenditures involved.

The licensed establishments remaining in the sampling frame (i.e., the public drinking places) were then listed by breaking them down into rooms or sections of larger rooms. Altogether there were 59 rooms or sections in the sampling list from the public drinking places. (Groups of patrons sitting at a table became the second stage sampling unit, see below).

Time sampling entered into the sampling procedures at this stage. A time sample purposively stratified by approximate occupancy rates in taverns at different hours was taken, and observation periods assigned to the rooms or sections which had been selected into the sample.

Altogether there were 636 hours of observation[25]. All of these were done in three-hour shifts, so that there were 212 shifts which were assigned to different rooms or sections. The hours of observation were divided into four 3-hour shifts: 1-4 p.m., 4-7 p.m., 7-10 p.m., and 10 p.m. -1.a. m. The number of shifts in each time slot was determined by approximate occupancy rates during the shift on the respective weekdays. The patrons were selected as groups of at least two persons sitting at selected tables.

There were four different samples taken, all designed for specific purposes:

1. The Probability Sample. This consists of 249 hours of observations in 49 different rooms or sections. This sample was designed to yield a probability sample of behaviour of patrons in public drinking establishments. The rooms/sections of the public drinking places were selected by using sets of random numbers. The usefulness of this sample lies in that it will provide us with prevalence and incidence estimates of the extent of certain types of drinking and other behaviour, especially affective behaviour, in the public drinking places of the community. It will also provide occupancy patterns in public drinking places and other incidental information.

   Due to the (unavoidable) multistage sampling procedures and the limitations as to size of sample, sampling errors of behaviour displayed in our sample could be considerable, if fluctuations in patron characteristics and behaviour are sufficiently large between different establishments, different days of the week and different hours of the day, that is if certain types of behaviours are clustered to certain hours of the day and/or to certain drinking establishments. Through our data we will, however, have a certain amount of control over these factors, and the influence of this clustering on variance and standard error can be calculated.

2. The Sample of Establishments. This sample consists of 387 hours of observations in five randomly selected public drinking establishments. In these establishments one room or section was selected for observation in a systematic fashion: Six to twelve hours on Monday to Thursday (1 p.m.-1 a.m., 4 p.m.-1 a.m. or 7 p.m.-1 a.m., depending on the occupancy patterns for the particular drinking place). Twelve hours on Friday (1 p.m.-1 a.m.) and twelve hours on Saturday (1 p.m.-1 a.m.). This sample was selected to ensure continuous time samples, and thus a more detailed study of occupancy patterns and behaviour which in all probability would not be attained in the Probability Sample. It also afforded a more detailed description of the establishments and their clientele, etc.

3. The High-Risk Sample. This sample was selected on the basis of the ranking of licensed establishments by thirteen police supervisors of the Thunder Bay Police Force (See Appendix 8 for the set of instructions given to the supervisors). This sample consists of the five establishments which placed highest in the ranking of risk of violence as based on the experience of the police supervisor. The hours during which these establishments were covered were the same as for

the establishments in the sample of Establishments. The purpose of this sample was to obtain comparative material which might help explain why patrons in certain establishments are more likely than patrons in others to exhibit aggressive behaviour.

4. The Holiday Sample. Since the Christmas and New Year's holidays were included in the period of study, it was decided that possible influence on behaviour patterns of the global cultural factors connected with the holidays would be examined. This part of the study has to be looked upon as a pilot study, and the time sample consisted of only 36 hours of observations in six establishments in the Sample of Establishments and the High-Risk Sample. To ensure comparability, all observations in this sample were done during the same hours (7 p.m.-10 p.m.) in all these establishments. Two 7-10 p.m. sessions were done in each of the establishments. One of the sessions was carried out immediately before Christmas (December 21-23) and the other between Christmas and New Year's Eve (December 27-30). The results from this sample will be compared with the results from the corresponding time slot in the Sample of Establishments and the High-Risk Sample.

c. Observers and their training

In order to 1) provide better validity by crosschecks between observers and a partial division of labour, 2) make the observational procedure seem as natural as possible, 3) make it easier to prevent interruptions of observations by other patrons, and 4) provide alibis and minimal "harassment" of female observers, the observations were carried out by two-person teams. At least one member of each team was male.

There were six such pairs of observers. In four of these both observers were male, in the remaining two, one observer was female and the other male. Six of the observers were undergraduate students, three were graduate students and three were working at various white collar jobs. The range in ages was 24-32 years.

Before the start of observations about nine hours of training was provided. This consisted of an introduction to observational studies, the background of the present study, presentation of the material to be used and training in observing and recording behaviour variables. As part of the training a videotape of drinking scenes from different educational films produced by the Addiction Research Foundation[26] was used in order to sensitize the observers to the patron characteristics and behaviour to be observed, and to provide a rough idea of the reliability of certain estimates and the recording of certain events on the film. This part of the training also gave an indication of the limits of reliable classification for later analyses. As part of the training the observer pairs conducted an average of four hours of observations under field conditions. These were discussed in later training sessions.

The observers were kept unaware of any hypotheses or questions which formed the rationale of the study. The inclusion of non-emotional behaviour in the recording of observations also aided in avoiding contamination of this kind.

d. Observational sessions

To the extent that it was possible within the time limitations of the observers, the observational sessions were assigned systematically to the teams over hours, weekdays and establishments. The systematic assignments were designed to minimize idiosyncratic features of observer teams which could confound effects of characteristics of the establishments, observational hours and weekdays. The extent of deviations from ideal assignments because of time restrictions of the observers are evident from Tables 28 and 29 in Appendix 3. Analyses will be carried out to determine the possible influence on the data of these deviations from the ideal.

The observations were carried out over the period between November 1, 1977 and February 18, 1978[27]. The monthly distribution of hours of observation was as follows:

November, 1977 - 165 hours
December, 1977 - 168 hours
January, 1978 - 189 hours
February, 1978 - 114 hours

Observations were carried out in 28 public drinking places as part of one sample or another. The following table shows the number of different establishments covered by each of the six teams:

Team 1	18
Team 2	17
Team 3	18
Team 4	16
Team 5	22
Team 6	4

The number of hours of observation of the six teams are set out below:

Team 1	132 hours
Team 2	132 hours
Team 3	102 hours
Team 4	90 hours
Team 5	159 hours
Team 6	21 hours

e. Behaviour observed

The data collected by the observers were of four different kinds:

1) On four different occasions during a shift, on arrival and every hour after arrival, one of the observers collected "overview data" on the patrons and activities in the room under observation (See Appendix 9 for a copy of the coding sheet used).

2) All openly violent incidents within the room or section under observation were noted and details recorded after the observational session on a short questionnaire (See Appendix 9).

3) The bulk of the observations were recorded on a small tape recorder with a lapel microphone. This was done in order to avoid having papers on the table which might arouse the curiosity or suspicions of the patrons and thus interfere with the observational process and/or affect the behaviour of the patrons who were being observed. Also, in rapid interactional sequences the use of paper and pencil would have been too slow.

4) Since a few of the sessions were plagued by technical difficulties in recording, it was decided that a "Summary Sheet" of the activities at the observed tables be filled out after the end of the session (See Appendix 9). The categories to be coded in these sheets overlap with those asked about for the last drinking occasion in a public drinking place in the interview study. Methodologically relevant comparisons can thus be made between the "summary sheets" and the information available in the taped accounts of interaction and, on the aggregate level, between these two data sets and information on the respondents'

last drinking occasion in a public drinking place in the interview study.

Observers were provided with a map showing the location of tables and chairs and other landmarks in the room/section. The latter were used to facilitate orientation (For a copy of such a map see Appendix 9). The selection of tables was originally planned according to random sampling principles. This proved somewhat cumbersome, however, and the idea had to be dropped in order not to overburden the observers, and in this way, jeopardize the reliable collection of a sufficient amount of data. Instead the following procedure was adopted:

1. Upon arrival the observers selected one empty table where they would have a good view of as large a portion of the room as possible. 2. One of the observers marked out the seating of patrons at the beginning of the observations, and also the location of the observer team on the map. 3. Within a short distance from their table the observers selected one table each for observation, without regard for the number of patrons at the table or any of their characteristics except that tables with only one patron were not to be selected. In addition to the two tables selected for observations at arrival, empty tables close to where the observers sat were designated as potential third tables. The first new patrons who sat down at any of these third tables were selected for observation. This was done partly to ensure that some patrons would be observed from the time they first came into the tavern. However, if at least two patrons were not seated at any of these tables within thirty minutes after the beginning of the observational sessions, the observers were instructed to select another, already occupied, table for observation. In some cases, more than three tables were observed at one time because of the lack of activity in the group of patrons. If all subjects at an observed table left, the observers were instructed to pick another table for observations, in case more than one hour remained of the

observational session. Since many patron groups left during the course of the session and, new groups were selected in their place, there were very often more than three different groups observed during one session, ranging to a maximum of ten in number. The number of groups observed in the study is approximately 1100. The number of patrons observed exceeds 3000[28].

The absence of strict randomness in selecting tables for observation can be partially remedied later by introducing some controls for selection biases based on the information from the maps, which show the distribution of patron groups in the room/section at the time when the selection of the first two tables was done. Secondly, the third table to be observed was selected by a random procedure. Comparisons between the characteristics of patrons at these tables and the other patrons will give an indication of the extent of possible bias on all available variables.

One of the observers in the team handled the tape recorder, recorded information onto the tape, and observed the activities of two groups of patrons. The other observer observed a third table, collected information on the number of patrons, etc. in the room/sections at one-hour intervals, (the "overview data") and made notes on any violent incidents that occurred during the session.

The following information was recorded onto the tape recorder for each patron at the selected tables at the beginning of the observations of the patron:

1. Approximate age
2. Sex
3. Ethnicity and language spoken (if possible to ascertain)
4. Clothing and other possible indicators of socio-economic status
5. Signs of intoxication: slurred speech, unsteady gait, exaggerated gestures, etc.

6. The type of beverage and container from which the patron was drinking at the start of the observation

If an observed group was joined by additional patrons, the same characteristics were recorded as well as their subsequent behaviour. The patrons observed were given fictitious names by which they were referred to in the recording of information. In addition to drinking, the behaviour observed included all moving to and from the table, and activities of the patrons with special emphasis on the activities listed on the summary sheet of activities which the observers used as a reference list during the observations (See Appendix 9). Also recorded were the activities of patrons who were the subject of sustained attention by any or all patrons at the observed table.

For each act or change in activity by a patron the time (to the closest minute) and the behaviour was recorded. Basically the aim was to know for each table the characteristics of patrons who were present at any time and their activities or acts at any time and towards whom the activity was directed. The categories of behaviour to be subjected to a detailed computer analysis include verbal or physical aggressive or affectionate behaviour, (other) physical touching, other expressive behaviour (such as dancing around, clapping hands etc.), drinking etc. Appendix 10 provides a transcript of a fairly active session in terms of prevalence of emotional behaviour.

For each incident of physical violence, whether it occurred at the observed tables or somewhere else in the room or section, an information sheet was filled out after the session. During the session some brief notes were written down (some observers also recorded this information on the tape recorder). A copy of this information sheet is reproduced in Appendix 9. The location of incidents was marked on the map of the room. Altogether 41 incidents of physical violence were recorded. The total number of hours of observation ranged from 3 to 69 between the different establishments and this of course has a great influence on the probability of violent incidents recorded for each individual drinking place[29].

f. Analytical considerations

The sampling of time periods during which observations were conducted was weighted in approximate proportion to the amount of activity and interaction in the room or section. This was done by adjusting the hours of observation by the occupancy rates in rooms or sections observed in the initial stages of the project. It explains the distribution of observational hours over time of day and days of the week as shown in Table 29 and 30. A final check of the correctness of the weighting will be carried out. Any adjustments necessary to render aggregate data directly representative of activities and interaction in the public drinking places of the community will be instituted.

The fact that the study includes a probability sample of rooms or sections of public drinking places, would make possible limited generalizations to the universe of activities and interaction in public drinking places of the community, were it not for the lack of probability sampling of groups of patrons observed. As mentioned above, however, certain controls can be instituted to indicate the limits for such generalizations.

In later analyses, the behaviour of patrons will be related to:

1. Stable characteristics of the public drinking place such as size, location, typical clientele etc.
2. Global activities and characteristics of the room or section as available in the hourly overviews such as occupancy rate,

dancing, performance of band, or stripper, occurrence of violent incidents, etc.

3. The aggregate activities of the other patrons in the observed group.

4. Individual acts of other patrons in a sequential analysis of interaction.

5. The amount of alcohol consumed by the patron and signs of intoxication as rated by the observers.

Specific hypotheses are deducible from a model of alcohol's disorganizing effect on perception and cognition and the consequent randomization of perceptual-cognitive cues. This model has been presented in its general outline in Pernanen (1976). These hypotheses pertaining to emotional behaviour follow directly from the model:

With increasing alcohol consumption and higher BAC's,

1) the fluctuations of emotional behaviour per time until will increase,
2) the escalation and de-escalation process of emotional behaviour will be faster and less patterned,
3) the behaviour of one interactor will be more random and less predictable from the actions of another.

Analyses of interaction sequences will provide information on escalation and de-escalation patterns which will be related to the amount of alcohol consumed. It is predicted that these processes will change with very high BAC's.

Correlational analyses will relate information on alcohol use (amounts and types of beverages consumed, etc.), and characteristics of interactants and the setting, to different forms of emotional behaviour.

This study will also serve as a partial aggregate validity check of information in the interview study pertaining to variables dealing with drinking and other behaviour in public drinking places. It will hopefully help in interpreting some of the data from the interview study, and the study of police records, by providing information on the processes from which violence results. These processes are not easy to arrive at through interviews or studies of available records.

The analysis of the data from high-risk establishments may give indications of specific "time-out" or other global explanatory features of these, and provide evidence of a possible self-selection of patrons to these establishments, which then would lead to a partly spurious relationship between alcohol use and violence.

A cross-cultural comparison with behaviour in public drinking places in the community in Finland on all the variables and interrelationships presented above may provide theoretically fruitful results.

3. Study of Violent Crime Reports

Traditionally, the study of the aggregate relationship between alcohol use and violent behaviour has been restricted to the investigation of the proportion of offenders and/or victims of violent crime who were drinking before the occurrence of the crime (e.g., Verkko, 1951; Shupe, 1954; Wolfgang, 1958;

Aho, 1967, 1976; Mayfield, 1972; Virkkunen, 1974). Taken by itself the study of violent crime in the Thunder Bay community is a straight continuation of this tradition, with some attempted additions and slight modifications in the type of data collected. The main function of this part of the study is, however, to serve as a link in the "three-pronged" collection of data on aggressive behaviour and its connection with alcohol use.

The rate of violent crimes that have come to the attention of the police is relatively high in the city of Thunder Bay. According to the latest available statistics Thunder Bay places sixth among 27 Canadian communities which have a population of 100,000 and over, with its 1976 violent crime rate of 1,013 per 100,000 (Statistics Canada, 1978a)[30].

The units in the study on violent crime consist of all incidents of violence in the city of Thunder Bay which came to the attention of the Thunder Bay Police Department during the period between April 1, 1977 and March 31, 1978, and for which an "Occurrence Report" was filled out (See Appendix 11 for a copy of this form). These reports, with the exclusion of reports for those occurrences which were declared "unfounded", were coded onto special coding sheets (see Appendix 11) by clerical staff in the Thunder Bay police department.

The following table shows the distribution of the nature of the crime, as defined by the police:

	%	N
Homicide	0.2	2
Wounding	1.7	14
Assault causing bodily harm	23.5	199
Other assault	65.1	552
Rape	0.9	8
Other sexual offence	1.9	16
Robbery	6.7	57
	100	848

a. Planned analysis

These 848 reports on violent crime form the data base for this part of the community study. The most immediate analyses of the data will include the following: 1) distributions by age, sex and other background variables of suspect/offender and victim, 2) incidence rate in these sub-populations for being a) offender and b) victim, 3) distributions by the characteristics of the crime situation, weekday, hour of day, location of crime in area of city and type of place (home, street or park, tavern, etc.), 4) alcohol use by suspect and victim for the above three types of statistics.

One important aspect of the study of police records will be a comparison with the interview survey of the results of all the four types of analyses listed above. This will among other things indicate the usefulness of crimes that come to the attention of the police as indicators of the characteristics of all violent events in the community. Other relevant questions which can be approached by this comparison include the extent to which alcohol is overrepresented or underrepresented in crimes that come to the attention of the police, and the extent to which certain alcohol use patterns, locations, etc., are over- or underrepresented compared to the "true" incidence of violence[31].

In addition to the role of the study of violent crime in the total project, it was hoped that this study would aid in measuring more closely the different dimensions of the independent variable of "alcohol use" and its causal concomitants, and to test more specific hypotheses pertaining to the epidemiological relationship. Thus, in addition to the dichotomy of whether alcohol was or was not used by the offender and victim prior to the occurrence, attempts were made to gather information on the type of alcoholic beverage and the amount consumed, and also the duration of drinking which preceded the violent incident. It was hoped that data on amounts and type of beverage consumed by the offender and victim when compared to general drinking patterns in relevant subgroups of the population, as available from the interview study, would show high-risk patterns of use. Amounts consumed per time unit would have roughly corresponded to BAC's. Type of beverage would have given indications in the aggregate as to the possible effects of congeners, and the alcohol content of the beverage on the probability of violent crime. Duration of drinking would have provided indication of the effects of possible sleep deprivation and other factors related to time (For a discussion of these factors in the causal accounting of violent crime, see Pernanen, 1976).

For these purposes, the police supervisors of the Thunder Bay Police Department were approached and asked to supervise the collection of this information by the police officers. A special effort was made by the police to collect this information in the field. However, the difficulties related to gathering it, especially in emotionally charged domestic situations, were overwhelming. The natural role of the policeman in arriving at the scene of a violent incident is to calm down the victim and/or offender, and bringing up the sensitive issue of alcohol use, would, in many cases, have counteracted this objective. No analyses can be carried out on the basis of the scattered cases for which this information was collected. The table below shows the percentage of cases (out of all cases in which drinking was reported to have occurred) for which data on the amount, type and duration of drinking were available in the occurrence reports:

	Type	Amount	Duration
Suspect (N=236)	12.3	5.9	10.2
Victim (N=206)	12.6	7.3	9.2

Assessments of the degree of intoxication of suspect was known in 90 cases and for victim in 84 cases. These make up 38.1% and 40.8% respectively of cases for which drinking was known to have occurred.

Future attempts at gathering more detailed data on alcohol use by offenders and victims in violent crime would probably be more successful if the police officers were given a short questionnaire to fill out for each occurrence. Another method, which may be tried later in connection with this project, is to interview offenders and/or victims of violent crime about alcohol use and other details of the event. A third method which could be used, would be to follow the cases in this sample through the courts, hoping that court records would provide more detailed information on alcohol use. However, it is to be expected that the cases that go to court would form a biased subsample of the sample cases. The proportion of the different types of purely assaultive crimes which were cleared by charge, cleared otherwise, or not cleared, show this to be the case:

	Cleared by charge	Otherwise cleared	Not Cleared	Total	(N)
Assault causing bodily harm, wounding, homicide	29.3%	54.0%	16.7%	100	(215)
Other assault	10.3%	78.3%	11.4%	100	(552)

It is obvious from this table that there is a strong tendency to clear minor assaultive offences out of court, and that data extracted from court records would be biased on the central variable of severity of the attack. Additional attrition, and probably more selection bias, occurs when charges are dropped in the period between the filing of the occurrence report and the date of court appearance.

It also proved difficult to get information on the simple dichotomy whether the victim or offender had consumed alcohol before the violent incident. The following table shows the percentage distribution of alcohol use by the offender and victim in the total sample:

	Victim (N=848) %	Suspect/Offender (N=848) %
Alcohol consumed	24.3	27.8
Alcohol not consumed	23.0	8.1
Alcohol use not known	52.7	64.0
	100	100

Alcohol use was not to be coded, unless there was explicit mention of it in the occurrence report. The strictness with which this criterion was applied partly determines the number of "not known" cases. "Circumstantial evidence" of alcohol use was not enough to classify offender or victim as having used alcohol. This is shown by the fact that for a great many of the incidents which took place in a public drinking place, alcohol use by the offender and victim was coded as "not known":

	Victim (N=77) %	Suspect/Offender (N=77) %
Alcohol consumed	52	40
Alcohol not consumed	6	-
Alcohol use not known	42	60
	100	100

It is possible to make tentative corrections of alcohol involvement on the aggregate level for the violent crime occurrences. This will be attempted later. No corrections can, of course, be made on the individual level. Fortunately, comparisons can be made in some analyses between alcohol and non-alcohol groups, leaving out the "not known" cases. Estimates of incidence and prevalence of alcohol involvement will suffer most from these cases of missing information.

Due to the partly different nature of sexually motivated crime and robberies as compared to assaults which did not include these motives, the analyses will mostly be carried out separately for these three categories of violent crime.

A final report of the total project will integrate the information obtained from the study of violent crimes with the data from the observational study of and with data from the interview study. By necessity, all the comparisons and the integration have to be carried out on the aggregate level[32].

FOOTNOTES

1) See also Pernanen (1976) on the increased likelihood of being apprehended by the police while under the influence of alcohol and on possible influence of other biasing factors.

2) It is impossible to tell whether this represents a real increase in alcohol involvement, the increase is not statistically significant and it is also possible that recording of alcohol involvement has improved.

3) Aho's (1976) figure for 1968 is 71% as compared to Krokfors' (1970) 73% (N=92).

4) Unfortunately, there are no data which would be sufficiently representative on the alcohol involvement in assaults in Canada (or Ontario). Thus, the corresponding calculations cannot be carried out for assaults.

5) Small group research into the causal processes could later provide valuable information, if properly carried out.

6) The possibility exists, of course, that the problem of generalizability is considered sufficiently important to warrant a study of a probability sample from a larger geographical unit, such as Ontario or the whole of Canada. In this context a community study can serve as a pretest by providing information on the validity of certain measures, variables that seem to be of causal import etc.

7) The logical symbol "$\cap$" between the labels for two sets shows that the designated set is formed from the intersection of the two sets. The symbol "N" shows that we are here concerned with the numerical size of the set in question. In the discussion we have implicitly delimited the measures to refer to the same geographical area and time period.

8) As an extension of the symbolism we can also express two basic epidemiological measures. If "P" is the set of population at risk, e.g., the set of persons over a certain age, the expression N(V)/N(P) refers to the incidence of violence. If "VP" refers to the persons who committed one or more violent

acts during the period, N(VP)/N(P) is the prevalence of violence. We mention these measures since they will be used in later reports of this study.

9) In less than 20 cases the envelopes were either not sealed, or opened after the interview by the interviewer to complete or correct information given in the interview. In a few cases the envelopes were opened at the survey office by the interviewer in order to complete or change information.

10) The number of interviews done in Finnish is sufficiently large to allow some tentative analyses into possible differences in response due to English versus Finnish versions of the interview schedule.

11) The languages which had to be left out of the survey were: Polish, Ukrainian, Slovak, "Yugoslav", Spanish and Cantonese. "Incapable" included one person who fell ill during the interview, six who were too intoxicated to be interviewed, and three mentally retarded persons. "Other" reasons include appointment mix-ups, selected person stating he/she had already been interviewed, and unknown reasons for refusal, i.e., interviewer lost or never returned sample card.

12) No interviews were conducted by telephone.

13) The boundaries of the areas were determined by the wish to facilitate comparisons with the police record data on the occurrences of violent crime. Unfortunately, the areas do not coincide with census tracts, electoral wards or any other administrative units. Thus, findings cannot be related to available statistics, although the use of approximations will make possible some rough analyses of this kind.

14) Eight of these were filled out by men and three by women. It is quite possible, of course, that some of the other returned questionnaires were filled out by somebody else but the selected person. This we have no way of controlling, and it is something one has to live with generally in most mail surveys.

15) In hindsight, asking for "unwillingness" to answer these questions would probably have been less ambiguous than asking for "hesitation". Hesitation can also be due to difficulties in remembering etc. and although the purpose of the question was explained to the interviewers in the training sessions,

the ambiguity may have persisted in some cases. These questions will be analyzed in more detail in the methodological report referred to above.

16) It should be pointed out that the different measures presented in Tables 22a, 22b, 23a, 23b, 24a, 24b and 25 do not provide independent corroboration of any tendencies, since these measures are based on the same sample cases.

17) Needless to say, some attempts will be made to ascertain the truth of such a hypothesis in later analyses.

18) It should be noted that covering all drinking occasions participated in by the respondents during a specific period will still not give us a self-weighting representative sample of drinking occasions in the community, since the probability of inclusion into the sample will not be equal for all drinking occasions, but will be directly proportional to the number of participants in the occasion. However,this type of sample will provide us with a self-weighting representative sample of participants in drinking occasions. The method will give us a probability sample of drinking occasions which can be used as a basis for weighting. The specific aims of the analyses will, of course, determine the choice of unit and methodology.

19) Strictly speaking, the results pertain to numbers of time periods of the day. The reference period was 7 days and each day was divided into 7 time periods for which respondents were asked about their drinking. The proportions probably do not differ very much from the true values for numbers of drinking occasions. The data are on file at the Addiction Research Foundation, and secondary analyses are under way.

20) Some credence in our method can also be gained from Simpura's recent national survey in Finland (Simpura,1978). He found that some estimates of characteristics of drinking occasions did not differ very much whether they were based on a time sample of one week or on a sliding time sample where respondents were represented by approximately the same number of drinking occasions independently of their drinking frequency.

21) The few cases with very high numbers of incidents of physical violence and threats have a great influence on the noncoverage of contextual data. The situation is more favourable than might seem at first glance, since it is likely that the high numbers represent repeated violence with the same or similar

features. This also means that weighting procedures are more feasible that would be the case if these incidents were independent of each other.

22) The comparatively low numbers of threat situations can largely be explained by the fact that threats which led to actual physical violence on the same occasion were excluded. This was done in order to facilitate a study of factors which were related to a de-escalation of aggressive encounters with and without alcohol use.

23) The estimation procedures are not related here, since more direct measures will be used later to arrive at a more reliable estimate.

24) This tradition of violence has been the object of several studies, e.g., Haavio-Mannila (1958), Ylikangas (1974 and 1976).

25) This includes 24 hours of observations which were carried out as part of the training of interviewers. These will be excluded from later analyses.

26) We want to express our thanks to the Audio/Video Productions Department of the Addiction Research Foundation for producing this videotape.

27) Originally it was planned that about one-third of the observations be carried out in May and June of 1977. It was thought that this would have provided some insights useful in planning content areas of the interviews study which was to be carried out in the fall. It would also have provided partial control of seasonal fluctuations in tavern behaviours, and drinking behaviour. This did not prove feasible, however, since planning of the study required more time than had been anticipated.

28) It is probable that the same patrons were observed more than once. This duplication cannot be checked with the means available to the study. However, this only means that the patrons are roughly weighted by attendance, and time samples of activities are more beneficial to the study than any attempted avoidance of duplication.

29) In fourteen, or exactly half of the observed establishments, there was at least one recorded violent incident. Eighteen of the forty-one incidents occurred in one drinking place. This

establishment was placed very high by the police supervisors in the ranking as to risk of physical violence. It was observed during 54 hours. Thus, on the average, physical violence occurred every three hours of observation. The incidents were clustered to certain observational sessions, with two 3-hour sessions having four separate incidents each, and two having two incidents each.

30) Vancouver, with 1240, had the highest rate in this group of communities. In the statistics for property crimes Thunder Bay is in 9th place among the same communities. For "all offences" the community has the second highest rate of all these communities. This may partly reflect a high degree of police activity in Thunder Bay.

31) If the results as to the usefulness of police records as indicators of alcohol-related violence are positive, a system of regular monitoring of the association could be set up in sample communities. The effects of any policy measures, etc. potentially affecting the incidence of alcohol-related violent crime could then be better assessed.

32) Comparisons on the individual level are not possible since we did not e.g., set out to interview the offenders or victims of violent crimes in the interview study or to observe these offenders or victims when they went to public drinking places. Confidentiality requirements and other ethical considerations, and other more practical factors, would probably have made such an approach impossible, had we contemplated an integration on the individual level.

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APPENDIX 1

- Letter to respondents

Dear Sir/Madam,

During the last few years the topic of violence has received a great deal of attention in our society. From all the discussions in the mass media and among experts one thing seems to be clear: more research is needed to settle even the most basic questions. Some of these questions are: what is the extent of violence and aggression in our society, what factors cause violence, who are most likely to be the victims of violence, what lifestyles most likely lead to violence etc.

With a view of answering these questions and providing some solutions to social problems connected with violence, we are carrying out a sociological study of people's opinions and experiences of violence in Thunder Bay. This study is part of a comparative international project. Because of its location, size and ethnic multiplicity Thunder Bay has been chosen as the community representing Canada. The study is funded both by the federal and provincial governments (Health and Welfare Canada and the Addiction Research Foundation of Ontario).

A sample of 1500 adults has been selected at random from the general population of Thunder Bay. You are one of the persons chosen by this random procedure. During the next week or so, one of our interviewers will contact you at your home. We would be grateful if you would give him or her about one hour of your time in answering the questions. To show our appreciation of your co-operation we will, if you wish, send you a copy of the report on the study, which will be finished in about one year.

In order to make sure that the interviewer has interviewed the right person we have enclosed an address label which the interviewer will affix to the sealed envelope containing the questionnaire at the end of the interview. After the interviewer has sealed the envelope it will not be opened again until it arrives at the research centre. The interviewer has signed a statement binding him/her to strict confidentiality with regard to all interviews. The analyses of all interviews will be carried out by computer. At no stage will the answers be connected with the names of the persons interviewed.

I hope that you will agree to help us with the Canadian part of this international study. Your contribution will be greatly appreciated.

Yours sincerely,

Kai Pernanen,
Project Director,
c/o A.R.F. Centre,
505 Lillie St.
Thunder Bay, Ont. P7C 4Y8
(Phone: 622-1861)

APPENDIX 2

- Interview schedule
- Flash cards
- Assessment sheet

To the selected respondent:

As was mentioned in the letter you received the provincial and the federal governments are both financing this study. We are interested in people's opinions about violence and aggressive behaviour, and we would also like to have some information on your own personal experiences of aggressive behaviour in people.

I want to stress that any information you give is strictly confidential. If you, for some reason, still feel like not answering a particular question, you are of course free not to.

At the end of the interview I will first make sure that I haven't accidentally missed a question, and then I will seal the envelope and affix the address label which you received in the letter.

The report of this study will be ready in about a year from now. If you are interested in the results, you can sign up for a copy of the report on this list (HAND RESPONDENT LIST).

---

1. People have suggested a number of reasons for violence in our society. I have a list of some of these here (SHOW CARD A). Could you give me the number printed next to the reason which you think is the most important? .... ☐

   Which do you think is the second most important reason?............ ☐

   Which do you think is the third most important reason?............. ☐

2. Now I will read you a number of statements about violence and I would like you to tell me whether you completely agree with these statements or whether you mostly agree, neither agree nor disagree, mostly disagree or completely disagree. To make it easier (HAND RESPONDENT CARD B) you can indicate how much you agree or disagree with each statement by just giving me the number next to what best describes your feelings about the statement.

a. Violence in Canada has increased over the past five years........ ☐

b. Violence is part of some sports and should be allowed without intervention by the legal authorities............................. ☐

c. Most of the people who commit murder are mentally disturbed...... ☐

d. Man is not aggressive by nature.................................. ☐

e. Alcohol is responsible for a large part of the violence in our society.. ☐

f. People who physically assault others when they are drunk should not be punished as hard as those who do so when they are sober... ☐

g. Violence on T.V. is responsible for some of the violent crimes committed in Canada... ☐

h. Some people who are not at all aggressive when they are sober can get really violent after a few drinks............................ ☐

i. Children under 12 should not be allowed to watch people get killed on T.V.. ☐

j. There are some areas in Thunder Bay where I do not feel safe walking alone after dark.. ☐

k. There will probably be more violence in our country in the near future... ☐

l. There is nothing wrong with slapping a child who has been disobedient... ☐

m. Too much alcohol can make anybody violent........................ ☐

n. A fist fight between two men is sometimes necessary............. ☐

o. Under no circumstances does a man have the right to beat his wife ☐

p. It is normal for a man to hit somebody who provokes him.......... ☐

q. When a person does you wrong you should try to forgive him or her ☐

r. Disagreements between people can always be resolved by talking things over.. ☐

3. Now I have some questions about your personal experiences of violence. We don't want to include physical contact which is part of some sports and games or which was not intended to hurt you. Here is a list of some violent or aggressive things that can happen to people (HAND RESPONDENT CARD C). Can you tell me which of these things have happened to you since you were 15 years old? Include everything whether it was done by a person you know or a stranger. Just tell me "Yes" or "No" as I read the letters beside the items

	Yes	No	
a	1	2	☐
b	1	2	☐
c	1	2	☐
d	1	2	☐
e	1	2	☐
f	1	2	☐
g	1	2	☐

Please describe: ______________________________

______________________________ ☐

IF "NO" TO ALL OF THE ABOVE GO TO Q.26

4. Thinking back over the last 12 months, on how many different occasions has anybody hurt you physically in any of the ways listed on the card (CARD C) or in any other way?.................... ☐☐

5. When was the last time any of these things happened to you?....Month ☐☐

Year ☐☐

6. At that time which of the things listed on the card (CARD C) did the person (or persons) do to hurt you? Just tell me "Yes" or "No" as I read the letters

	Yes	No	
a	1	2	☐
b	1	2	☐

(CONT'D)

		Yes	No	
6.(CONT'D)	c	1	2	☐
	d	1	2	☐
	e	1	2	☐
	f	1	2	☐
	g	1	2	☐

Please describe: ______________________________

____

7. Where did this happen? (SHOW CARD D) Please give me the number next to the kind of place.. ☐

IF "4" (PUBLIC DRINKING PLACE) ASK:

7a. Would you mind telling me the name of this place? ______________

____

IF "6" (OTHER) ASK:

Please describe: ______________

____

		Yes	No	
8.	Was this in the City of Thunder Bay?	1	2	☐

Where was it?

____

9.a At approximately what time of the day or night did it take place?.. Hour ☐☐

a.m. = 1 p.m. = 2 ☐

9.b What day of the week was it? .... ☐

Mon=1, Tues=2, Wed=3, Thur=4, Fri=5, Sat=6, Sun=7

Don't know/don't remember=9

10. Could you give me a short description of how and why this incident started? ______________________________

____

____

And how did it end? ______________________________

____

____

11. How many other people saw it happen, except for you and the other person?... ☐☐☐

IF NO OTHERS GO TO Q.13

		Yes	No	
12.	Did any of these people try to stop what was going on?	1	2	☐
13.	Did more than one person hurt you?..............	1	2	☐

13a. How many were they?............. ☐☐

ASK RESPONDENT TO THINK OF THE MAIN ASSAILANT IN ANSWERING THE QUESTIONS ABOUT THE PERSON WHO HURT HIM/HER (QUESTIONS 14-17,22 AND 23)

14. On this card a number of characteristics to describe a person are listed (HAND RESPONDENT CARD E). Could you please tell me how old you would estimate that the person was who hurt you? Just give me the number next to the age group .... ☐

15. Could you now tell me, in the same way, whether the person was male or female? .... ☐

16. Could you also give me the number beside the phrase that describes your relationship to this person?................................ ☐

IF "1","2" OR "3" GO TO Q.18

IF "7" (OTHER) ASK:

16a. Could you describe how you knew or how you met this person with a few words? ____ ☐

____

17. Could you also tell me the number next to the phrase that best describes how well you knew the person? .... ☐

		Yes	No	
18.	Were you injured at all?	1	2	☐

GO TO Q.20

		Yes	No	
19.	What did you do about your injury? Did you...			
	a. Go to a hospital, doctor or nurse?	1	2	☐
	b. Take or apply any medication?	1	2	☐

		Yes	No	
20.	Were the police involved at any stage?	1	2	☐

GO TO Q.22

		Yes	No	
21.	Were any charges laid?	1	2	☐

		Yes	No	Don't know	
22.	Had the person who hurt you been drinking alcohol before the incident?	1	2	3	☐

GO TO Q.24

		Yes	No	Don't know	
23.	Would you say that this person was drunk?	1	2	3	☐

		Yes	No	Don't remember	
24.	Had you yourself had any alcohol before this incident took place?	1	2	4	☐

GO TO Q.26

25. Could you tell me what you had been drinking? You can give me the approximate amount in number of glasses, bottles or total ounces, whichever way you find easiest. Did you have any...

Type of beverage		No. of glasses	No. ozs. per glass	No. of bottles	Size of bottle	Total ounces	
Beer							☐☐☐
Table wine							☐☐☐
Dessert wine							☐☐☐
Whisky, Rye	Mixer						☐☐☐
Vodka							☐☐☐
Gin							☐☐☐
Rum							☐☐☐

Other alcoholic beverages:

....						☐☐☐
....						☐☐☐
....						☐☐☐
....						☐☐☐

26. Now, I would like to ask you a few questions about another form of aggressive behaviour that you may have experienced, that is, threats of physical violence. When you think of your past experience please do not include threatening remarks made jokingly. Also, don't count the occasions when you actually experienced physical violence in connection with a threat.

Can you please tell me which of these things have happened to you since you were 15 years old? (HAND RESPONDENT CARD F) Just tell me "Yes" or "No" as I read the letters beside the items

	Yes	No	
a	1	2	☐
b	1	2	☐
c	1	2	☐

Please describe ____________________

____

(CONT'D)

26.(CONT'D)

	Yes	No	
d	1	2	☐
e	1	2	☐
f	1	2	☐

Please describe: ______________________________

____

IF "NO" TO ALL OF THE ABOVE GO TO Q.46

27. Thinking back over the last 12 months on how many occasions has somebody threatened you with some kind of weapon, that is how many times has a, b or c (CARD F) happened to you? Do not count any occasions when somebody actually hurt you with a weapon or object. ☐☐

28. Again, thinking back over the last 12 months on how many occasions has somebody said something threatening to you, that is how many times has d, e or f (CARD F) happened to you? Again, do not count any occasions when somebody actually hurt you physically. ☐☐

29. When was the last time somebody threatened you in any of the ways listed on the card? (CARD F)............................ Month ☐☐

Year ☐☐

30. Which of the things listed on the card did the person (or persons) do at that time? Just tell me "Yes" or "No" as I read the letters

	Yes	No	
a	1	2	☐
b	1	2	☐
c	1	2	☐

Please describe: ______________________________

____

d	1	2	☐
e	1	2	☐

(CONT'D)

		Yes	No	
30. (CONT'D)	f	1	2	☐

Please describe: ______________________________

____

31. Where did this happen? (SHOW CARD D) Please give me the number next to the kind of place.................................... ☐

IF "4" (PUBLIC DRINKING PLACE) ASK:

31a. Would you mind telling me the name of this place? ______________

____

IF "6" (OTHER) ASK:

Please describe: ______________

____

	Yes	No	
32. Was this in the City of Thunder Bay?...............	1	2	☐

Where was it?

____

33a At approximately what time of the day or night did it take place?.. Hour ☐☐

a.m. = 1 p.m. = 2 ☐

33b What day of the week was it? .... ☐

Mon=1, Tues=2, Wed=3, Thur=4, Fri=5, Sat=6, Sun=7

Don't know/don't remember=9

34. Could you give me a short description of how and why this threat was made? ______________________________

____

____

____

	Yes	No	
35. Did more than one person threaten you at that time?	1	2	☐

35a. How many persons threatened you?..... ☐☐

ASK RESPONDENT TO THINK OF THE MAIN PERSON WHO MADE THREATS IN ANSWERING QUESTIONS 36 TO 41

36. On this card a number of characteristics to describe a person are listed (HAND RESPONDENT CARD E). Could you please tell me how old you would estimate that the person was who threatened you? Just give me the number next to the age group................ ☐

37. Could you also tell me, in the same way, whether the person was male or female?... ☐

38. Please give me the number next to the phrase that describes your relationship to this person?.................................... ☐

IF "1", "2" OR "3" GO TO Q.40

IF "7" (OTHER) ASK:

38a. Could you describe with a few words how you knew or how you met this person? ____

____

39. Could you also tell me the number next to the phrase that best describes how well you knew the person?............................ ☐

	Yes	No	Don't know	
40. Had the person who threatened you been drinking alcohol before this happened?......	1	2	3	☐

GO TO Q.42

	Yes	No	Don't know	
41. Would you say that this person was drunk?...	1	2	3	☐

	Yes	No	Don't remember	
42. Had you yourself had any alcohol before this incident took place?................	1	2	4	☐

GO TO Q.44

43. Could you please tell me what you had been drinking? You can give me the approximate amount whichever way is easiest for you, in number of glasses, bottles or total ounces. Did you have any...

(CONT'D)

Type of beverage	No. of glasses	No. ozs. per glass	No. of bottles	Size of bottle	Total ounces	
Beer						☐☐☐
Table wine						☐☐☐
Dessert wine						☐☐☐
Whisky, Rye : Mixer						☐☐☐
Vodka :						☐☐☐
Gin :						☐☐☐
Rum :						☐☐☐

Other alcoholic beverages:

....						☐☐☐
....						☐☐☐
....						☐☐☐
....						☐☐☐

44. What do you think stopped the threat from being carried out or leading to actual violence? ____

____

____

45. How did you feel about this incident? Did you feel in danger of your life, in danger of getting hurt or in no real danger?............... ☐

Life in danger= 1, Danger of getting hurt= 2, No real danger= 3

46. When was the last time you got really angry at somebody?.......

Month ☐☐

Year ☐☐

47. Where did this happen? (SHOW CARD D) Please give me the number next to the kind of place.................................... ☐

(CONT'D)

47. (CONT'D)

IF "4" (PUBLIC DRINKING PLACE) ASK:

47a. Would you mind telling me the name of this place? ________

____

IF "6" (OTHER) ASK:

Please describe: ____________

____

		Yes	No	
48.	Was this in the City of Thunder Bay?..............	1	2	☐

Where was it?

____

49. What did you do when you got angry? (HAND RESPONDENT CARD G) Just tell me "Yes" or "No" as I read the letters

	Yes	No	
a	1	2	☐
b	1	2	☐
c	1	2	☐

Please describe: ________________________

____

	Yes	No	
d	1	2	☐
e	1	2	☐
f	1	2	☐

Please describe: ________________________

____

50. Why did you get angry? ________________________

____

____

____

	Yes	No	Don't know	
51. Had the person you got angry at been drinking alcohol before this happened?......	1	2	3	☐

	Yes	No	Don't remember	
52. Had you yourself had any alcohol before it happened?	1	2	4	☐

53. And now I would like to ask you a question about violence that you may have witnessed, but not been involved in yourself. Again do not include playful aggressive behaviour or physical contact which is part of some sports. Thinking back over the last 12 months have you seen somebody do any of the following things to another person (HAND RESPONDENT CARD H). Just tell me "Yes" or "No" as I read the letters

	Yes	No	
a	1	2	☐
b	1	2	☐
c	1	2	☐
d	1	2	☐
e	1	2	☐
f	1	2	☐
g	1	2	☐

Please describe: ______________________________

______________________________ ☐

IF "NO" TO ALL OF THE ABOVE GO TO Q.57

54. On how many different occasions during the last 12 months have you seen physical violence as described on the card (CARD H)........ ☐☐

55. Where have you seen these things happen during the last 12 months? (SHOW CARD D) Just tell me "Yes" or "No" as I read the numbers

	Yes	No	
1	1	2	☐
2	1	2	☐
3	1	2	☐

(CONT'D)

		Yes	No	
55. (CONT'D)	4	1	2	☐
	5	1	2	☐
	6	1	2	☐

Please describe: ____________________________

____

____

IF "4" (PUBLIC DRINKING PLACE) ASK:

55a. Would you mind telling me the name of this place? ____________________

____

____

	Yes	No	
56. Did all these incidents take place in the City of Thunder Bay?................................	1	2	☐

57. Now we would need some information about your own consumption of alcohol. First of all, how often do you yourself use alcohol? Please look at this card (HAND RESPONDENT CARD I) and tell me the number next to what best describes how often you have at least one drink of beer, wine or spirits or any other kind of alcohol...... ☐

IF "9" OR "0" GO TO Q.104

58. Now let's look at your consumption during the past 30 days. On how many of the last 30 days have you had at least one drink of alcohol?.. ☐☐

59. On how many of the last 30 days did you have a drink of alcohol in your own home or in somebody else's home? .... ☐☐

60. When did you last have a drink of alcohol in your own home or somebody else's home, not counting today? .... Day ☐☐

Month ☐☐

Year ☐☐

61. What did you drink then? You can tell me the approximate amounts in number of glasses, bottles or total ounces, whichever way you find easiest. Did you have any...

Type of beverage	No. of glasses	No. ozs. per glass	No. of bottles	Size of bottle	Total ounces	
Beer						☐☐☐
Table wine						☐☐☐
Dessert wine						☐☐☐
Whisky, Rye : Mixer						☐☐☐
Vodka :						☐☐☐
Gin :						☐☐☐
Rum :						☐☐☐

Other alcoholic beverages:

....						☐☐☐
....						☐☐☐
....						☐☐☐
....						☐☐☐

62. What time was it when you had your first drink of alcohol on that occasion? (WRITE IN CLOSEST FULL HOUR).................. Hour ☐☐

a.m.= 1 p.m.= 2 ☐

63. And what time was it when you finished your last drink of alcohol on that same occasion? (WRITE IN CLOSEST FULL HOUR).... Hour ☐☐

a.m.= 1 p.m.= 2 ☐

64. About how many people were with you, counting yourself?............. ☐☐

IF ALONE (01) GO TO Q.73

65a. How many of these people were under 30 years old?.................. ☐☐

65b. How many of these people were male? .... ☐☐

66. What was your relationship to the people in your group? (HAND RESPONDENT CARD J) Just say "Yes" or "No" as I read the letters. Were any of them...

	Yes	No	
a	1	2	☐
b	1	2	☐
c	1	2	☐
d	1	2	☐
e	1	2	☐
f	1	2	☐
g	1	2	☐
h	1	2	☐
i	1	2	☐
j	1	2	☐
k	1	2	☐
l	1	2	☐

Please describe: ______________________________

____

67. What was the ethnic background of the people in your group? Just tell me "Yes" or "No" as I read the list. Were any of them...

	Yes	No	
a. Ukrainian................	1	2	☐
b. Italian..................	1	2	☐
c. Polish...................	1	2	☐
d. Scottish.................	1	2	☐

(CONT'D)

67. (CONT'D)

	Yes	No		
e. Irish....................	1	2	☐	
f. English..................	1	2	☐	
g. German...................	1	2	☐	
h. Finnish..................	1	2	☐	
i. Native Indian............	1	2	☐	
j. Canadian - people you do not think of as having another ethnic background	1	2	☐	
k. Other...................	1	2	☐	☐ ☐

Please describe: ______________________________

____

68. Here is a list of things that people do when they get together (HAND RESPONDENT CARD K). At this occasion did you or anybody else in the group do any of the following? Tell me "Yes" or "No" as I read the letters.

IF "YES" ASK: Would you say that there was a fair amount or only a little of this?

	YES		NO	
	A fair amount	Only a little		
a	3	4	5	☐
b	3	4	5	☐
c	3	4	5	☐
d	3	4	5	☐
e	3	4	5	☐
f	3	4	5	☐
g	3	4	5	☐
h	3	4	5	☐

(CONT'D)

		YES		NO	
		A fair amount	Only a little		
68. (CONT'D)	i	3	4	5	☐
	j	3	4	5	☐
	k	3	4	5	☐
	l	3	4	5	☐
	m	3	4	5	☐
	n	3	4	5	☐
	o	3	4	5	☐
	p	3	4	5	☐
	q	3	4	5	☐
	r	3	4	5	☐
	s	3	4	5	☐
	t	3	4	5	☐
	u	3	4	5	☐
	v	3	4	5	☐

Please describe: ______________________________

____

	Yes	No	Don't remember	
69. Did you get angry at somebody while you were drinking or afterwards?..........	1	2	4	☐

No / Don't remember → GO TO Q.73

70. Why did you get angry? ______________________________

____

____

____

____

71. Was the person you got angry at... (READ LIST) .... ☐

1. Drinking in your company

2. In your company, but not drinking

3. Not present

72. What did you do when you got angry? (HAND RESPONDENT CARD G)
Just tell me "Yes" or "No" as I read the letters.
Did you do..

	Yes	No	
a	1	2	☐
b	1	2	☐
c	1	2	☐

Please describe: ______________________________

____

	Yes	No	
d	1	2	☐
e	1	2	☐
f	1	2	☐

Please describe: ______________________________

____

73. On how many days of the last 30 days did you have a drink of alcohol in a public drinking place, such as a tavern, bar, restaurant etc.? .... ☐☐

IF RESPONDENT HAS HAD AT LEAST ONE DRINK OF ALCOHOL IN A PUBLIC DRINKING PLACE DURING THE LAST 30 DAYS GO TO Q.75

74. On how many days of the last 12 months have you had a drink of alcohol in a public drinking place? .... ☐☐

IF RESPONDENT HAS NOT HAD A DRINK OF ALCOHOL IN A PUBLIC DRINKING PLACE DURING THE LAST 12 MONTHS GO TO Q.92

75. People go to public drinking places for different reasons. On this card some of these reasons are listed (HAND RESPONDENT CARD L). Could you tell me what reasons are important to you by telling me "Yes" if the reason is important and "No" if it is not important, as I read the letters.

(CONT'D)

75. (CONT'D)

	Yes	No	
a	1	2	☐
b	1	2	☐
c	1	2	☐
d	1	2	☐
e	1	2	☐
f	1	2	☐
g	1	2	☐
h	1	2	☐
i	1	2	☐
j	1	2	☐
k	1	2	☐
l	1	2	☐

76. Now, I would like to ask you specifically about the last time you had a drink of alcohol in a public drinking place, not counting today. First of all, when was this.................. Day ☐☐

Month ☐☐

Year ☐☐

77. Would you mind telling me what the name of the place was? ____________ ☐

____

78. What did you have to drink then? Again, you can give me the approximate amount in number of glasses, bottles or total ounces, whichever way you find easiest. Did you have any...

(CONT'D)

78. (CONT'D)

Type of beverage		No. of glasses	No. ozs. per glass	No. of bottles	Size of bottle	Total ounces	
Beer							☐☐☐
Table wine							☐☐☐
Dessert wine							☐☐☐
Whisky, Rye	Mixer						☐☐☐
Vodka							☐☐☐
Gin							☐☐☐
Rum							☐☐☐

Other alcoholic beverages:

....						☐☐☐
....						☐☐☐
....						☐☐☐
....						☐☐☐

79. What time was it when you had your first drink of alcohol on that occasion? (WRITE IN CLOSEST FULL HOUR).......... Hour ☐☐

a.m.= 1 p.m.= 2 ☐

80. And what time was it when you finished your last drink of alcohol on that same occasion?......................... Hour ☐☐

a.m.= 1 p.m.= 2 ☐

81. About how many people were in your group, counting yourself?......... ☐☐

IF ALONE (01) GO TO Q.87

82. How many of these people were male?.............................. ☐☐

83. How many were under 30 years old?.................................. ☐☐

84. What was your relationship to the people in your group? (HAND RESPONDENT CARD J) Just tell me "Yes" or "No" as I read the letters. Were any of them...

	Yes	No	
a	1	2	☐
b	1	2	☐
c	1	2	☐
d	1	2	☐
e	1	2	☐
f	1	2	☐
g	1	2	☐
h	1	2	☐
i	1	2	☐
j	1	2	☐
k	1	2	☐
l	1	2	☐

Please describe: ______________________________

____

85. What was the ethnic background of the people in your group? Just tell me "Yes" or "No" as I read the list. Were any of them...

	Yes	No	
a. Ukrainian.................	1	2	☐
b. Italian..................	1	2	☐
c. Polish...................	1	2	☐

(CONT'D)

85. (CONT'D)

	Yes	No	
d. Scottish	1	2	☐
e. Irish	1	2	☐
f. English	1	2	☐
g. German	1	2	☐
h. Finnish	1	2	☐
i. Native Indian	1	2	☐
j. Canadian - people you do not think of as having another ethnic background	1	2	☐
k. Other	1	2	☐

Please describe: ______________________________

____

86. Here is a list of things that people do when they get together (HAND RESPONDENT CARD K). At this occasion did you or anybody else in the group do any of the following? Tell me "Yes" or "No" as I read the letters.

IF "YES" ASK: Would you say that there was a fair amount or only a little of this?

	YES		NO	
	A fair amount	Only a little		
a	3	4	5	☐
b	3	4	5	☐
c	3	4	5	☐
d	3	4	5	☐
e	3	4	5	☐
f	3	4	5	☐
g	3	4	5	☐

(CONT'D)

86. (CONT'D)

	YES		NO	
	A fair amount	Only a little		
h	3	4	5	☐
i	3	4	5	☐
j	3	4	5	☐
k	3	4	5	☐
l	3	4	5	☐
m	3	4	5	☐
n	3	4	5	☐
o	3	4	5	☐
p	3	4	5	☐
q	3	4	5	☐
r	3	4	5	☐
s	3	4	5	☐
t	3	4	5	☐
u	3	4	5	☐
v	3	4	5	☐

Please describe: ______________________________ ☐

____

87. While you were in the drinking place did you see anybody do any of the violent things listed on this card (HAND RESPONDENT CARD H). Again, do not count playful aggressive behaviour. Tell me "Yes" or "No" as I read the letters.

	Yes	No	
a	1	2	☐
b	1	2	☐
c	1	2	☐

(CONT'D)

87. (CONT'D)

	Yes	No	
d	1	2	☐
e	1	2	☐
f	1	2	☐
g	1	2	☐

Please describe: ______________________________ ⬚

____

88. Did you yourself get angry at somebody while you were drinking in this place or afterwards?............................ Yes 1 | No 2 | Don't remember 4 ☐

GO TO Q.92

89. Why did you get angry? ______________________________ ⬚

____ ⬚

____ ⬚

____

____

90. Was the person you got angry at... (READ LIST)...................... ☐

1. Drinking in your company
2. In your company, but not drinking
3. Present in the same place, but not in your company
4. Not present

91. What did you do when you got angry? (HAND RESPONDENT CARD G)
Just tell me "Yes" or "No" as I read the letters.
Did you do...

	Yes	No	
a	1	2	☐
b	1	2	☐

(CONT'D)

		Yes	No	
91. (CONT'D)	c	1	2	☐

Please describe: ____________________

____

	Yes	No	
d	1	2	☐
e	1	2	☐
f	1	2	☐

Please describe: ____________________

____

92. How much would you say was the most alcohol you drank on any one occasion during the last 30 days?

> IF RESPONDENT DID NOT HAVE A DRINK OF ALCOHOL DURING THE LAST 30 DAYS ASK: Or during the last 12 months?

Again, you can give me the approximate amounts in number of glasses, bottles or total ounces, whichever way you think is easiest. Did you have any...

Type of beverage		No. of glasses	No. ozs. per glass	No. of bottles	Size of bottle	Total ounces	
Beer							☐☐☐
Table wine							☐☐☐
Dessert wine							☐☐☐
Whisky, Rye	Mixer						☐☐☐
Vodka							☐☐☐
Gin							☐☐☐
Rum							☐☐☐

Other alcoholic beverages:

....						☐☐☐
....						☐☐☐
....						☐☐☐
....						☐☐☐

93. When was that?.. Day ☐☐

Month ☐☐

94. How long was it between the time you had your first drink of alcohol and the time you finished your last drink on that occasion? (WRITE IN NUMBER OF HOURS)... ☐☐

95. In what places did you drink on that occasion? (HAND RESPONDENT CARD D) Tell me "Yes" or "No" as I read the numbers.

	Yes	No	
1	1	2	☐
2	1	2	☐
3	1	2	☐
4	1	2	☐
5	1	2	☐
6	1	2	☐

Please describe: ______________________________

____

IF "4" (PUBLIC DRINKING PLACE) ASK:

Would you mind telling me the name of this place? ______________

____

____

96. Why do you think you had more alcohol on this day than you usually do?

____

____

____

____

97. Do you remember getting angry at somebody while you were drinking on this occasion? ☐

	Yes	No	Don't remember
occasion?	1	2	4

GO TO Q.103

98. Where was it that you got angry? (SHOW CARD D) Please give me the number next to the place ☐

IF "6" (OTHER) ASK: Please describe: ____________
____

99. How long had you been drinking when you got angry? (WRITE IN NUMBER OF HOURS) ☐☐

100. Why did you get angry? ____________
____
____
____
____

101. Was the person you got angry at ... (READ LIST) ☐

1. Drinking in your company
2. In your company, but not drinking
3. Present in the same place, but not in your company
4. Not present

102. What did you do when you got angry? (HAND RESPONDENT CARD G) Just tell me "Yes" or "No" as I read the letters.
Did you do...

	Yes	No	
a	1	2	☐
b	1	2	☐
c	1	2	☐

Please describe: ____________
____

(CONT'D)

102. (CONT'D)

	Yes	No	
d	1	2	☐
e	1	2	☐
f	1	2	☐

Please describe: ______________________________ ☐

____

103. Now I am going to read a list of reasons why people drink alcohol. Could you tell me what reasons are important to you by telling me "Yes" if the reason is important and "No" if it is not important.

	Yes	No	
a. Because it tastes good	1	2	☐
b. Because most of the people you know drink alcohol	1	2	☐
c. Because it helps you forget your problems for a while	1	2	☐
d. Because it is easier to talk to people after a couple of drinks	1	2	☐
e. Because it helps you go to sleep	1	2	☐
f. Because it helps you relax when you are tense or restless	1	2	☐
g. Because you are just used to it	1	2	☐
h. Because it perks you up when you are tired or in a bad mood	1	2	☐

104. Now I am going to read some statements that have been made about alcohol, and the way people behave when drinking. Could you again tell me if you agree or disagree with these statements in the same way as before? (HAND RESPONDENT CARD B)

a. Some men drink to have an excuse for fighting ☐

b. The feeling of happiness brought about by alcohol is not genuine ☐

c. If a man hits his wife when he is drunk it is not as bad as when he hits her while sober ☐

(CONT'D)

104. (CONT'D)

d. If people drink alcohol they should have one or two drinks a night instead of drinking heavily on weekends.......................... ☐

e. Alcohol brings out good things in many people................... ☐

f. Being drunk is something to be ashamed of....................... ☐

g. A person who is drunk is not responsible for his actions......... ☐

h. Drinking hard liquor makes people more aggressive than drinking beer.. ☐

i. Sober enjoyment is the only real enjoyment....................... ☐

j. Under the influence of alcohol one is allowed to do many things which are not proper when sober.................................. ☐

k. A man who kills somebody while he is drunk should get the same punishment as a sober man who kills somebody..................... ☐

l. Some people drink to make it easier to show their feelings....... ☐

m. If two friends get mad at each other while drinking, it should not affect their relationship when they are sober.................... ☐

n. We should forgive a person more easily for what he does when he is drunk... ☐

105. Would you say that there are areas or locations in Thunder Bay where there is more violence than in most other parts of the city? If so, could you name one or more such area or location?____________________

____

____

106. How much do you personally worry that you might be attacked or assaulted? Do you worry a lot, a little or not at all?.............. ☐

Worry a lot= 1, Worry a little= 2, Do not worry at all= 3

107. Have you prepared yourself in any way in case you would be attacked or assaulted? For example... (READ LIST)

(CONT'D)

107. (CONT'D)

	Yes	No	
a. Do you sometimes carry a weapon or object to defend yourself with?	1	2	☐
Please describe weapon or object: ________			☐
b. Do you practise some form of self-defense method?	1	2	☐
c. Do you avoid certain areas of the city?	1	2	☐

108. Now imagine the following situation: A man you dislike starts to curse and call you names in a loud voice some place where you and some friends are together. How likely would it be that you did any of the following things? (HAND RESPONDENT CARD M AND READ LIST)

	Definitely	Probably	Probably not	Definitely not	
a. Get so angry you'd hit him	1	2	3	4	☐
b. Try to stop it by threatening him	1	2	3	4	☐
c. Try to stop it by telling him off	1	2	3	4	☐
d. Call somebody like the police or the management.	1	2	3	4	☐
e. Try to laugh it off	1	2	3	4	☐
f. Try to ignore him	1	2	3	4	☐
g. Leave the place	1	2	3	4	☐

109. What do you think stops most people from physically hurting another person even when they are really angry? I would like to know whether you think the reasons I am going to read are important or not for people. Just tell me "Yes" or "No" as I read them.

	Yes	No	
a. Because they are afraid of getting hurt themselves	1	2	☐

(CONT'D)

109. (CONT'D)

	Yes	No	
b. Because they are concerned about what people who see them will think........................	1	2	☐
c. Because they are concerned about what their family will say............................	1	2	☐
d. Because they feel violence is wrong............	1	2	☐
e. Because they do not want to get into trouble with the law..................................	1	2	☐
f. Because they are concerned about what their friends will say............................	1	2	☐

110. And now finally, I have a few questions to ask about yourself. How long have you lived in Thunder Bay? (WRITE IN NUMBER OF YEARS, ROUND OFF TO CLOSEST FULL YEAR)................................. ☐☐

111. Have you lived most of your life in... ☐

1. A city or town
2. The country

112. In what country were you born? ______________________________

IF BORN IN CANADA OR THE UNITED STATES GO TO Q.116

113. What year did you come to Canada? (WRITE IN LAST TWO DIGITS OF YEAR) ☐☐

	Yes	No	
114. Are you a Canadian citizen?.........................	1	2	☐

115. Since you came to Canada how many times have you been back to the country where you were born?.. ☐☐

GO TO Q. 118

116. In what country was your mother born? ______________________________

117. In what country was your father born? ______________________________

IF BOTH PARENTS BORN IN CANADA OR THE UNITED STATES GO TO Q.125

118. What languages do you speak? ______________________________

____

____

IF ONE LANGUAGE ONLY GO TO Q.120

119. What language do you speak mostly at home? ______________________________

IN QUESTIONS 120-124 NAME COUNTRY OR COUNTRIES OF BIRTH OF RESPONDENT OR EITHER PARENT. IF PARENTS BORN IN DIFFERENT COUNTRIES OUTSIDE CANADA OR THE U.S. NAME BOTH

120. Do you have any close relatives in (NAME COUNTRY OR COUNTRIES) such as...

	Yes	No	
a. Your mother...............	1	2	☐
b. Your father...............	1	2	☐
c. Any sisters or brothers...	1	2	☐
d. Grandparents..............	1	2	☐
e. Other close relative......	1	2	☐

Please describe: ______________________________

____

	Yes	No	
121. Are you a member of any(NAME COUNTRY OR COUNTRIES) organizations here in Canada?......................	1	2	☐

	Yes	No	
122. Do you subscribe to any(NAME COUNTRY OR COUNTRIES) newspapers or magazines?............................	1	2	☐

123. How often would you say that you take part in any (NAME COUNTRY OR COUNTRIES) events that are arranged here in Thunder Bay? (HAND RESPONDENT CARD N)

(CONT'D)

123. (CONT'D) ☐

1. Very often
2. Fairly often
3. Sometimes
4. Hardly ever
5. Never

124. How often would you say that you eat typically (NAME COUNTRY OR COUNTRIES) food? (SHOW RESPONDENT CARD N)........................... ☐

1. Very often
2. Fairly often
3. Sometimes
4. Hardly ever
5. Never

125. And last of all a few questions to check how well our sample represents the Thunder Bay population. Please look at this card and tell me which category best describes your present status. (HAND RESPONDENT CARD O) Just give me the number of the category.............. ☐

IF "1" OR "2" GO TO Q.128

126. What is (was) your occupation or position? ______________________________ ☐

____

127. And what exactly do (did) you do? __________________________________ ☐

____

128. What is the highest level of schooling that you completed? (HAND RESPONDENT CARD P) Just give me the letter beside your highest level. (CIRCLE LETTER BELOW)

A B C D E F G ☐

129. Now please look at this card (HAND RESPONDENT CARD Q) and tell me which category includes the total 1976 yearly income, before taxes, of all the members of your household. Please just tell me the letter beside the category (CIRCLE LETTER BELOW) ☐

H I J K L M N O P

130. What year were you born? (WRITE IN LAST TWO DIGITS OF YEAR).......... ☐☐

131. What is your marital status? Are you.... ☐

1. Married
2. Single
3. Separated/divorced
4. Widowed
5. Other. Please describe: ____________________

____

132. WRITE IN SEX OF RESPONDENT, MALE= 1 FEMALE= 2 .... ☐

IF RESPONDENT, OR HIS MOTHER OR FATHER WAS BORN IN FINLAND GO TO Q.133 ON NEXT PAGE

Thank you very much. Now I am just going to quickly check that I haven't accidentally missed a question.

REMEMBER TO SIGN YOUR NAME, SEAL ENVELOPE AND AFFIX ADDRESS LABEL

IF RESPONDENT WAS BORN IN FINLAND, ASK:

133. Where in Finland were you born? ______________________

____

134. Where did you live most of your life in Finland? ________

____

IF RESPONDENT'S MOTHER (BUT NOT RESPONDENT) WAS BORN IN FINLAND, ASK:

135. Where in Finland was your mother born? ______________

____

136. Where did your mother live most of her life in Finland?

____

137. How old was she when she came to Canada?................ ☐☐

IF RESPONDENT'S FATHER (BUT NOT RESPONDENT) WAS BORN IN FINLAND, ASK:

138. Where in Finland was your father born? ______________

____

139. Where did your father live most of his life in Finland?

____

140. How old was he when he came to Canada?.................. ☐☐

Thank you very much. Now I am just going to quickly check that I haven't accidentally missed a question.

REMEMBER TO SIGN YOUR NAME, SEAL ENVELOPE AND AFFIX ADDRESS LABEL

CARD A

1. Poverty
2. Stresses of everyday life
3. Competition between people
4. Drugs
5. Problems in the family
6. Alcohol
7. Mental problems
8. Need for excitement
9. Lack of discipline in bringing up children

CARD B

1. Completely agree
2. Mostly agree
3. Neither agree nor disagree
4. Mostly disagree
5. Completely disagree

CARD C

a. Somebody hit you with some kind of object

b. Somebody punched you (with his/her fist)

c. Somebody kicked you

d. Somebody hurt you by throwing something at you

e. Somebody slapped you (with his/her hand)

f. Somebody hurt you by grabbing, pushing or shoving

g. Somebody hurt you in some other way. Please describe!

CARD D

1. At home
2. In somebody else's home
3. At work or school
4. In a tavern, restaurant or other place where alcohol is served
5. In the street or a park
6. Some other place. Please describe!

CARD E

Age

1. Under 15 years old
2. Between 15 and 19
3. Between 20 and 29
4. Between 30 and 39
5. Between 40 and 49
6. Between 50 and 59
7. Between 60 and 69
8. Over 70 years old

Sex

1. Male
2. Female

Relationship to person

1. Wife/husband
2. Mother/father
3. Sister/brother
4. Girlfriend/boyfriend
5. Somebody from work or school
6. Somebody from the neighbourhood
7. Other

How well did you know the person?

1. Very well
2. Fairly well
3. A little
4. Hardly at all
5. Not at all

CARD F

a. Somebody threatened you with a gun

b. Somebody threatened you with a knife

c. Somebody threatened to hurt you with some other weapon or object. Please describe!

d. Somebody said he/she was going to kill you

e. Somebody said he/she was going to beat you up

f. Somebody said he/she was going to hurt you in some other way. Please describe!

CARD G

a. Tell the person off

b. Hit the person you got angry at

c. Let the person know in some other way that you were angry. Please describe!

d. Take a drink

e. Try to forget it

f. Something else. Please describe!

CARD H

a. Hit somebody with some kind of weapon or object

b. Punch somebody (with his/her fist)

c. Kick somebody

d. Hurt somebody by throwing an object

e. Slap somebody (with his/her hand)

f. Hurt somebody by grabbing, pushing or shoving

g. Hurt somebody in some other way. Please describe!

CARD I

1. At least once a day
2. Nearly every day
3. Several times a week (3-4)
4. Twice a week
5. Once a week
6. About twice a month
7. About once a month
8. Less often than once a month but at least once a year
9. Less often than once a year
0. Never

CARD J

a. Your wife/husband
b. Your girlfriend/boyfriend
c. Your mother
d. Your father
e. Your son or daughter
f. Your sister or brother
g. Your sister-in-law or brother-in-law
h. Friends from work or school
i. Friends from the neighbourhood
j. Other friends
k. People you did not know from before
l. Other. Please describe!

CARD K

a. Dancing

b. Singing

c. Eating

d. Drinking toasts

e. Play games for money

f. Play games, but not for money

g. Talk about work or studies

h. Talk about money

i. Talk about sports or hobbies

j. Talk about other people

k. Talk about old times, reminiscing

l. Talk about drinking (alcohol)

m. Watch T.V.

n. Watch, listen to live entertainment

o. Listen to records, radio

p. Hugging, backslapping

q. Kissing, fondling

r. Arguing, quarreling

s. Showing off, bragging

t. Laughing

u. Crying

v. Some other activity of which there was a fair amount. Please describe!

CARD L

a. To play games like shuffleboard or pool etc.

b. To eat

c. To dance

d. To see friends

e. To get some excitement

f. To talk about interesting things

g. To feel close to people

h. To have a good time

i. To meet new people

j. To watch or listen to entertainment

k. To relax after a day's work

l. To let loose, to celebrate

CARD M

1. Definitely
2. Probably
3. Probably not
4. Definitely not

CARD N

1. Very often
2. Fairly often
3. Sometimes
4. Hardly ever
5. Never

CARD O

1. Housewife
2. Student
3. Retired/pensioned
4. Unemployed
5. Employed
6. Other. Please describe!

CARD P

A. Never attended school

B. Grade 1 - 4

C. Grade 5 - 8

D. Grade 9 - 11

E. Grade 12 - 13

F. Some college/university, but no degree

G. College/university degree

CARD Q

H. Under $ 1,000

I. Between $ 1,000 and $ 2,999

J. Between $ 3,000 and $ 4,999

K. Between $ 5,000 and $ 6,999

L. Between $ 7,000 and $ 9,999

M. Between $ 10,000 and $ 14,999

N. Between $ 15,000 and $ 19,999

O. Between $ 20,000 and $ 29,999

P. Over $ 30,000

Questionnaire No. ☐☐☐ - ☐☐

To be filled out by interviewer immediately after interview

1. Did respondent have any language difficulties?.................. ☐
   1. A great deal
   2. Some
   3. None at all

2. Was somebody else present in the same room during interview?...... ☐
   1. All the time
   2. Some of the time
   3. Not at all

   GO TO Q. 4

3. Did this seem to affect the answers given by respondent?......... ☐
   1. A great deal
   2. Somewhat
   3. Not at all

	Yes	No	
4. Did the respondent hesitate to answer some of the questions on alcohol use?....................	1	2	☐
On aggression or violence?......................	1	2	☐

5. Describe the interview briefly: ______________________________

____

____

____

____

____

APPENDIX 3

- Tables 1 - 30

Table 1

Cause of Attrition by Sex (unweighted totals)

	Refused		Aged		Sick		Language		Away		Incapable		Never home or Available		Other		Total	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Males	163	74.8	15	6.9	9	4.1	8	3.7	5	2.3	8	3.7	3	1.4	7	3.2	218	100
Females	90	68.2	12	9.1	11	8.3	8	6.1	5	3.8	2	1.5	3	2.3	1	0.8	132	100
Sex Not Known	17	(89.5)	1	(5.3)	-	-	-	-	1	(5.3)	-	-	-	-	-	-	19	100
TOTAL	270	73.2	28	7.6	20	5.4	16	4.3	11	3.0	10	2.7	6	1.6	8	2.2	369	100

Table 2

Sex Distribution of Completed Interviews, all Attrition Cases, Total Selected Sample, Final Refusals, and Reconsidered Refusals (unweighted totals)

	Total Selected Sample		Completed Interviews		All Attrition Cases		Final Refusals		Reconsidered Refusals	
	N	%	N	%	N	%	N	%	N	%
Males	830	56.1	612	55.1	218	59.1	163	60.4	36	52.2
Females	630	42.6	498	44.9	132	35.8	90	33.3	33	47.8
Sex Not Known	19*	1.3	-	-	19*	1.3	17*	6.3	-	-
TOTAL	1479	100	1110	100	369	100	270	100	69	100

* In 17 cases the sex of substitutions who refused were not recorded by the interviewers: In 2 cases it was not possible to ascertain from the name whether the selected person was male or female, and the sex was not recorded by the interviewer.

Table 3

Completed Interviews: Number of Housecalls by the Interviewer

Number of Housecalls	N	%
1	595	53.6
2	370	33.3
3	104	9.4
4	30	2.7
5	6	0.5
6 or more	5	0.5
TOTAL	1110	100

TABLE 4

Number of House Calls by the Interviewer(s) in all Attrition Cases, Final Refusals and Reconsidered Refusals

Number of House Calls	Attrition Cases		Final Refusals		Reconsidered Refusals	
	N	%	N	%	N	%
0*	21*	5.7	19*	7.0	-	-
1	189	51.2	128	47.4	15	22
2	70	19.0	55	20.4	33	48
3	32	8.7	26	9.6	14	20
4	16	4.3	13	4.8	6	9
5	3	0.8	3	1.1	1	1
6 or more	4	1.1	4	1.5	-	-
Not known	34	9.2	22	8.1	-	-
TOTAL	369	100	270	100	69	100

* In these cases the selected person or somebody else on his/her behalf phoned in to the survey office, declining an interview.

TABLE 5

Total Number of Attempts at Contact (house calls and phone calls) in Attrition Cases, Final Refusals and Reconsidered Refusals

Number of Attempts	Attrition Cases		Final Refusals		Reconsidered Refusals	
	N	%	N	%	N	%
1	72	19.5	25	9.3	-	-
2	82	22.2	62	23.0	6	9
3	57	15.4	49	18.1	23	33
4	42	11.4	39	14.4	19	28
5	34	9.2	30	11.1	8	12
6	14	3.8	13	4.8	2	3
7	10	2.7	9	3.3	-	-
8	12	3.3	10	3.7	5	7
9	-	-	-	-	3	4
10+	12	3.3	11	4.1	3	4
Not known	34	9.2	22	8.1	-	-
TOTAL	369	100	270	100	69	100

TABLE 6

Number of Interviewers Attempting to Get Interview (by House Call or Phone Call) in all Attrition Cases, Final Refusals and Reconsidered Refusals

Number of Interviewers	All Attrition Cases		Final Refusals		Reconsidered Refusals	
	N	%	N	%	N	%
1	142	38.5	78	28.9	2	3
2	188	50.9	161	59.6	58	84
3	33	8.9	30	11.1	9	13
4	1	0.3	1	0.4	-	-
Not known	5	1.4	-	-	-	-
TOTAL	369	100	270	100	69	100

Table 7

Reasons Given for Refusal to Give Interview by Reconsidered Refusals and Final Refusals

	No Reason Given	"Too Busy"	"Not Interested"	Stalling*	"Waste of Time and Money"	Doubts of Confidentiality	Other*
Reconsidered Refusals (N=69)	46%	25%	20%	39%	4%	0%	4%
Final Refusals (N=270)	41%	40%	36%	30%	4%	3%	11%
TOTAL	42%	37%	33%	32%	4%	2%	9%

*"Stalling" consisted of postponing decisions, asking interviewers on several contacts to try later, breaking appointments etc. "Other" reasons consisted of appointment mix-ups, selected person stating he/she had already been interviewed and unknown reasons for refusal, i.e., interviewer lost or never returned sample card.

TABLE 8

Unweighted Response Rates By Area of Thunder Bay
(see Map in Appendix 4)

	AREA											TOTAL
	1	2	3	4	5	6	7	8	9	10	11	
Response Rate	69.0	74.3	78.3	76.6	75.7	75.1	65.1	76.5	75.2	75.0	74.4	75.1
N	84	74	281	197	206	189	83	51	101	96	117	1479

Table 9

Distribution of City of Thunder Bay Population Aged 18 and Over in 1976
Compared With General Sample of Interview Study

Age	Male		Female		Total	
	Census (N=38,785)	Sample (N=509)	Census (N=38,879)	Sample (N=464)	Census (N=77,664)	Sample* (N=933**)
18-19	5.8	1.4	5.8	1.1	5.8	1.3
20-24	14.2	11.2	13.5	14.0	13.8	12.6
25-34	21.2	22.4	20.1	20.9	20.7	21.6
35-44	15.5	20.6	15.0	16.6	15.2	18.7
45-54	17.1	19.8	16.9	19.6	17.0	19.7
55-64	13.3	14.9	13.9	18.1	13.6	16.5
65-69	4.7	3.1	4.9	5.8	4.8	4.4
70+	8.2	6.5	9.9	3.9	9.0	5.2
Total	100	100	100	100	100	100

*Weighted by sex.

** Age not known for 6 respondents.

Source: Statistics Canada, 1978.

Table 10

Education of General Sample and the Part of the Thunder Bay Population Aged 15 and Over Which Did Not Attend School Full-time in 1976

Education	General Sample (N=933) %	Thunder Bay Population, 1976 (N=80,255) %
Less than grade 5	3.3	6.4
Grades 5-8	19.5	22.7
Grades 9-13	46.7	44.0
At least some post-secondary education	30.5	26.9
TOTAL	100	100

Source: Statistics Canada, 1978.

Table 11

Distribution of Occupational Category in General Sample and Thunder Bay Population in 1971

Occupational Category	General Sample (N=624)*	Thunder Bay Population (N=41740)
Managerial or administrative	5.9	4.3
Occupations in natural and social sciences, law and religion	6.7	4.6
Teaching and related occupations	6.6	4.5
Occupations in medicine and health	5.6	5.6
Clerical	13.8	16.2
Sales	10.7	10.7
Service	9.3	14.0
Farming, fishing, forestry, mining	1.0	3.1
Processing	8.7	5.4
Industrial production, machining	10.7	9.5
Construction	11.7	8.4
Transport and other	9.3	13.7
Total	100	100

*Included are only those respondents who were gainfully employed.

Source: Statistics Canada, 1974.

Table 12

The Distribution Of Attrition Cases In Interview Study By Reason For Attrition And Completion Status Of Mailed Questionnnaire

	Refusal	Aged	Sick	Language	Away	Never Home or Available	Incapable	Other	Total
MAILED - completed	65	2	1	1	-	-	1	1	71
- completed by wrong sex	11	-	-	-	-	-	-	-	11
- not completed	181	9	6	6	-	5	4	2	213
NOT MAILED*	13	17	13	9	11	1	5	5	74
TOTAL	270	28	20	16	11	6	10	8	369

*Reasons for not mailing questionnaires to 74 attrition cases included very high age and serious illness of the selected person. In addition, very persistent (sometimes) rude refusals and no knowledge of English excluded the selected person from the mailing list. In some cases of substitutions the name of the person was not known, and questionnaires could not be mailed.

Table 13

Unweighted Response Rates of The Mailed Questionnaires And The Total Response Rates (Interviews and Mailed Questionnaires) By Area of City

		Area Number*											
		1	2	3	4	5	6	7	8	9	10	11	Total
Return Rate Of Questionnaires Mailed	%	(11)	(17)	18	22	24	38	(21)	(40)	(18)	(28)	(30)	24.1
	N	18	12	50	41	38	40	24	10	17	18	27	295
Total Response Rate including interviews	%	2.4	2.7	3.2	4.6	4.4	7.9	6.0	7.8	3.0	5.2	6.8	4.8
	N	84	74	281	197	206	189	83	51	101	96	117	1479
Total Response Rate		71.4	77.0	81.5	81.2	80.1	83.1	71.7	84.3	78.2	80.2	81.2	79.9

*See Appendix 4 for map.

Appendix 3, Table 13: "Total Response Rate Including Interviews" should read
Per Cent Returns of Total Selected Sample

Table 14

Reasons Given For Refusal To Give Interview By Respondents Who Later Responded To Mailed Questionnaire, Those Who Did Not Respond To Mailed Questionnaire And Returns By Person Of Wrong Sex

	No Reason Given	"Too Busy"	"Not interested"	Stalling*	Waste of Time and Money	Doubts of Confidentiality	Other*
Mail Respondents (N=65)	32 (49%)	28 (43%)	26 (40%)	20 (31%)	2 (3%)	3 (5%)	4 (6%)
Mail Non-respondents** (N=181)	118 (65%)	69 (38%)	64 (35%)	55 (30%)	9 (5%)	4 (2%)	24 (13%)
Mail Respondents - Wrong Sex (N=11)	3	5	4	2	-	-	-

*"Stalling" consisted of postponing decisions, asking interviewers on several contacts to try later, breaking appointments, etc. "Other" included selected persons who said they had done interview already, stated emphatically that they wanted to be left alone, replied with expletives only, cited death in the family, were not allowed by another family member to take part, etc.

**Includes only those whom a questionnaire was sent to.

Table 15

Length of Interviews (In Minutes)

Length of Interviews (In Minutes)	N	%	Cumulative Percentage (N=1097)
10-29	21	1.9	1.9
30-39	103	9.3	11.3
40-49	226	20.4	31.9
50-59	214	19.3	51.4
60-69	294	26.5	78.2
70-79	112	10.1	88.4
80-89	28	2.5	91.0
90 and over	99	8.9	100.0
Not ascertained	13	1.2	-
Total	1110	100	-

Table 16

Distribution of Interviews Over Days Of The Week

Days of The Week	N	%
Monday	194	17.5
Tuesday	235	21.2
Wednesday	223	20.1
Thursday	191	17.2
Friday	122	11.0
Saturday	95	8.6
Sunday	44	4.0
Not ascertained	6	0.5
Total	1110	100

Table 17

Distribution Of Start Of Interviews Over Time Of Day

Hour Of Day	N	%	Cumulative Percentage (N=1100)
7 and 8 a.m.	2	0.2	0.2
9 a.m.	64	5.8	6.0
10 a.m.	118	10.6	16.7
11 a.m.	80	7.2	24.0
12 noon	44	4.0	28.0
1 p.m.	126	11.4	39.5
2 p.m.	93	8.4	47.9
3 p.m.	51	4.6	52.5
4 p.m.	37	3.3	55.9
5 p.m.	35	3.2	59.1
6 p.m.	97	8.7	67.9
7 p.m.	205	18.5	86.5
8 p.m.	110	9.9	96.5
9 p.m.	26	2.3	98.9
10 and 11 p.m.	12	1.1	100.0
Not ascertained	10	0.9	-
Total	1110	100	-

Table 18

Presence of Other Person(s) In the Interview Situation By Extent Of Language Difficulties Of The Respondent As Assessed By The Interviewer (per cent)

	Extent of Language Difficulties		
Other Person(s) Present	None (N=994)	Some or a Great Deal (N=95)	Total (N=1089*)
At no time	58.4	30.5	55.9
Part of the time	25.8	27.4	25.9
All of the time	15.9	42.1	18.2
Total	100	100	100

*Information on either or both variables was missing for 21 interviews.

Table 19

The Effect Of Presence Of Other Person(s) In The Interview Situation By The Extent Of Language Difficulties As Assessed By The Interviewer (per cent)

	Extent of Language Difficulties		
Presence of Other Person(s) Affected Response	None (N=413)	Some or a Great Deal (N=66)	Total (N=479)
Not at all	82.6	56.1	78.9
Somewhat	16.5	43.9	20.3
A Great Deal	0.9	-	0.8
Total	100	100	100

Table 20

Relationship Between Length Of Presence Of Other Person(s) And Extent Of Influence On Response As Assessed By Interviewers

	Other Person(s) Present		
Presence Affecting The Responses	Part Of The Time (N=282)	All Of The Time (N=196)	Total (N=478)
A Great Deal	0.4	1.5	0.8
Somewhat	13.8	29.1	20.1
Not At All	85.8	69.4	79.1
Total	100	100	100

Table 21

Relationship Between The Presence Of Other Person(s) In Interview Situation And Hesitation By Respondent To Answer Questions On Violence And Alcohol As Assessed By The Interviewer (per cent)

	Other Person(s) Present:			
Hesitation To Answer Questions On	At No Time (N=605)	Part Of The Time (N=281)	All Of The Time (N=198)	Total (N=1084*)
Neither Violence Nor Alcohol	88.9	84.7	86.4	87.4
Violence Only	5.1	10.0	5.6	6.5
Alcohol Only	2.8	2.8	4.5	3.1
Both Violence And Alcohol	3.1	2.5	3.6	3.0
Total	100	100	100	100

*Information on either or both variables was missing for 26 interviews.

Table 22a

Relationship Between Prevalence Of Selected Characteristics Of Drinking And Violence And Presence Of Other Person(s) In Interview Situation

	Presence Of Other Person(s):			
	At No Time (N=609)	Part Of The Time (N=282)	All Of The Time (N=198)	Total (N=1089*)
Per Cent Non-Abstainers	88.3	94.0	86.4	89.4
Per Cent Who Drank At Least Once a Day	4.9	6.7	13.6	7.0
Per Cent Who Drank During Past 30 Days	76.3	78.4	76.3	76.8
Per Cent Who Experienced Violence In Past 12 Months	8.8	8.7	8.2	8.7
Per Cent Who Experienced Threat With Weapon/Object In Past 12 Months	2.3	3.5	2.0	2.6
Per Cent Who Experienced Verbal Threat Of Violence In Past 12 Months	6.3	7.5	6.1	6.6

*Information was missing for 21 interviews.

Table 22b

Relationship Between Mean Consumption Of Alcohol By Respondents In Three Selected Drinking Occasions And Presence Of Other Person(s) In Interview Situation (Users Of Alcohol Only)

	Presence Of Other Person(s):			
Mean Number Of Centiliters Of Absolute Alcohol Consumed	At No Time (N=491)	Part Of The (N=248)	All The Time (N=159)	Total (N=898)
In Last Occasion In A Home	3.6	3.6	3.2	3.5
In Last Occasion In A Public Drinking Place	4.2	4.7	4.5	4.4
In Occasion When Most Was Consumed In Last 30 Days (or 12 mths)	7.9	8.7	8.3	8.2

Table 23a

Prevalence Of Selected Characteristics Of Drinking And Violence For Respondents Whose Responses Were Assessed To Be Affected And Not Affected By Presence Of Other Person(s)

	Affected (N=101)	Not Affected (N=372)	No Other Person Present (N=609)	Total (N=1089*)
Per Cent Non-Abstainers	90.1	91.0	88.3	89.4
Per Cent Who Drank At Least Once A Day	11.9	9.0	4.9	7.0
Per Cent Who Drank During Past 30 Days	77.2	77.5	76.3	76.8
Per Cent Who Experienced Violence In Past 12 months	11.1	7.8	8.8	8.7
Per Cent Who Experienced Threat With Weapon/object In Past 12 months	2.0	3.2	2.3	2.6
Per Cent Who Experienced Verbal Threat in Past 12 Months	7.9	6.4	6.3	6.6

*Information was missing for 21 interviews.

Table 23b

Mean Consumption Of Alcohol In Three Selected Drinking Occasions By Respondents Whose Responses Were Assessed To Be Affected And Not Affected By Presence Of Other Person(s)

Mean Number Of Centiliters Of Absolute Alcohol Consumed:	Affected (N=86)	Not Affected (N=320)	No Other Person Present (N=491)	Total (N=898)
- In Last Occasion In A Home	3.9	3.3	3.6	3.5
- In Last Occasion In A Public Drinking Place	4.7	4.6	4.2	4.4
- In Occasion When Most Was Consumed In Last 30 Days (or 12 months)	8.9	8.4	7.9	8.2

Table 24a

Prevalence Of Selected Characteristics Of Drinking Of Those Respondents Who Hesitated And Those Who Did Not Hesitate To Answer Questions On Alcohol Use, As Assessed By The Interviewer

	Hesitated (N=68)	Did Not Hesitate (N=1020)	Total (N=1088*)
Per Cent Non-Abstainers	92.6	89.2	89.4
Per Cent Who Drink At Least Once A Day	5.9	7.0	6.9
Per Cent Who Drank During Past 30 Days	75.8	76.8	76.7

*Information was missing for 22 interviews.

Table 24b

Mean Consumption Of Alcohol In Three Selected Drinking Occasions By Those Respondents Who Hesitated And Those Who Did Not Hesitate To Answer Questions On Alcohol Use, As Assessed By The Interviewer

Mean Number of Centiliteres Of Absolute Alcohol Consumed	Hesitated To Answer (N=56)	Did Not Hesitate To Answer (N=840)	Total (N=898)
In Last Occasion In A Home	5.1	3.4	3.5
In Last Occasion In a Public Drinking Place	5.1	4.4	4.4
In Occasion When Most Was Consumed In Last 30 Days (or 12 months)	10.6	8.0	8.2

Table 25

Prevalence Of Selected Characteristics Of Violence Of Those Respondents Who Hesitated And Those Who Did Not Hesitate To Answer Questions On Experiences Of Violence, As Assessed By The Interviewer

	Hesitated (N=106)	Did Not Hesitate (N=981)	Total (N=1087*)
Per Cent Who Experienced Violence In Past 12 Months	9.4	8.4	8.7
Per Cent Who Experienced Threat With Weapon/Object In Past 12 Months	0.9	2.8	2.6
Per Cent Who Experienced Verbal Threat In Past 12 Months	4.8	6.8	6.6

*Information was missing for 23 cases.

Table 26

Distribution Of Events Of Violence And Threats By Year Of Occurrence

Year Of Most Recent Incident	Physical Violence	Threats (Verbal Or With Weapon/Object)
1978-1975	175	117
1974-1970	108	58
1969-1965	60	39
1964-1960	38	12
1959-1950	49	23
1949-1940	45	15
1939-1930	12	4
1929-1915	10	3
Does not remember year	36	18
Never experienced such incident since the age of 15	547	816
Not ascertained	30	5
Total	1110	1110

Table 27

Number of Incidents of Physical Violence, Threats With Weapon Or Object And Verbal Threats Of Physical Violence Experienced By Respondents

Number of Incidents In Last 12 Months	Physical Violence	Threats With Weapon/ Object	Verbal Threats Of Physical Violence
None	996	1079	1030
1	57	15	33
2	20	2	20
3	3	7	6
4	7	2	5
5	2	-	3
6	6	1	2
7	-	1	-
8	1	-	-
10	1	-	2
20	1	-	-
24	-	1	-
29	1	-	-
32	-	-	1
60	1	-	-
Does not know/remember	3	-	4
Not ascertained	11	2	4
Total	1110	1110	1110

Table 28

Area of Birth in Finland of Respondents or Mothers and Fathers of Respondents in Per Cent
(see Map in Appendix 7)

Area	Respondents Born in Finland (N=148)*	Respondents Born in Canada Mothers Born in Finland (N=56)*	Fathers Born in Finland (N=66)*
1	32	42	42
2	18	11	8
3	11	13	16
4	16	18	14
5	14	9	10
Seceded Areas	9	7	10
TOTAL	100	100	100

*Percentages are calculated only on the basis of the sample cases for which area of birth was known. The number of cases for which area was not known was 5 for respondent, 12 for respondent's mother and 18 for respondent's father.

Table 29

Distribution of Observational Shifts by the Different Teams

	Observational Shift				
Team No.	1 p.m. - 4 p.m.	4 p.m. - 7 p.m.	7 p.m. - 10 p.m.	10 p.m. - 1 a.m.	Total
Team 1	5	10	14	15	44
Team 2	7	12	15	10	44
Team 3	8	4	12	10	34
Team 4	-	8	5	17	30
Team 5	15	7	20	11	53
Team 6	1	-	3	3	7
TOTAL	36	41	69	66	212

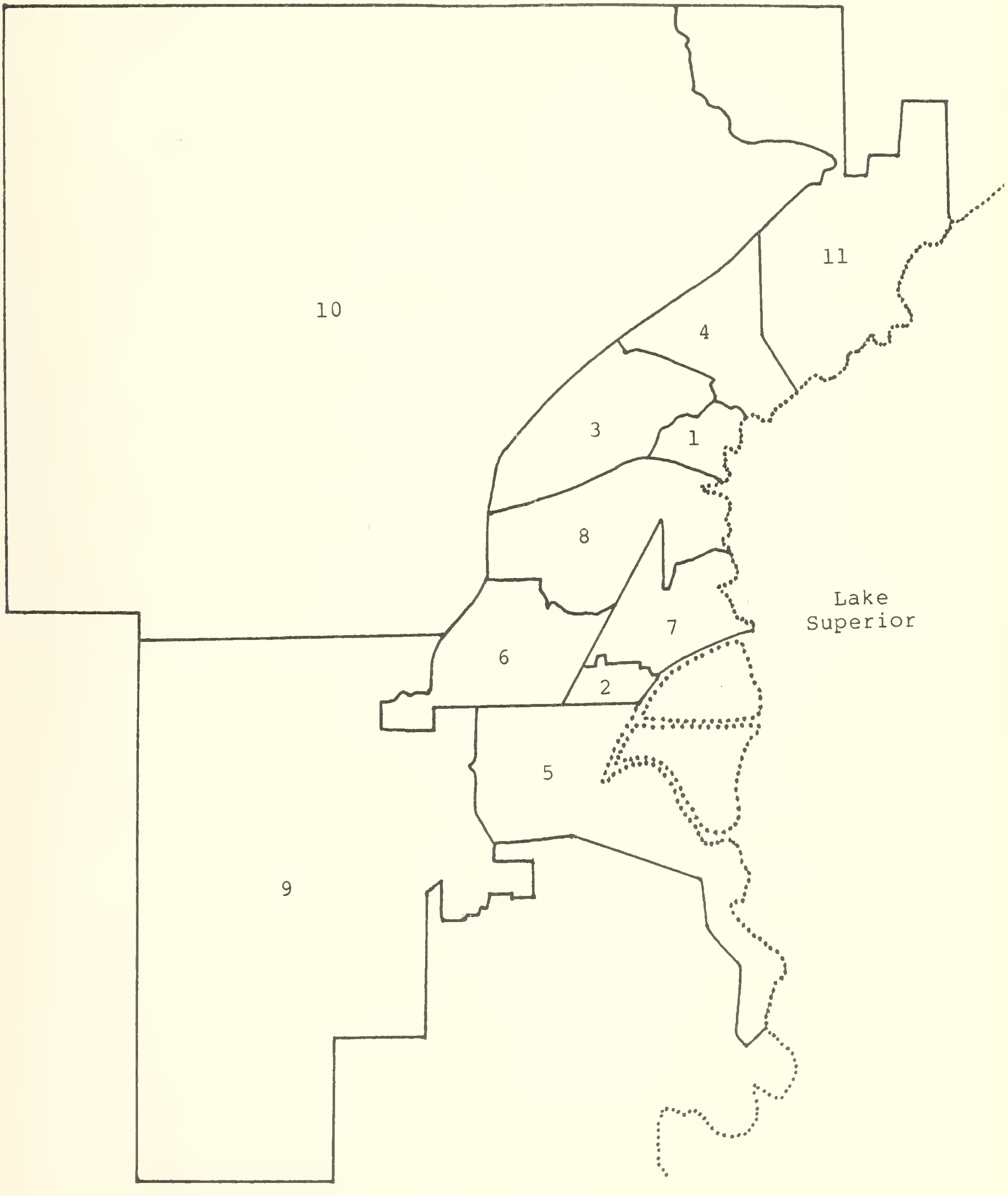
Table 30

Distribution of Observational Hours on Different Weekdays by the Observational Teams

	Weekday						
Team No.	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Total
Team 1	-	3	12	12	48	57	132
Team 2	3	21	9	24	42	33	132
Team 3	9	3	6	-	33	51	102
Team 4	9	-	3	12	27	39	90
Team 5	6	24	36	24	36	33	159
Team 6	3	3	3	6	3	3	21
TOTAL	30	54	69	78	189	216	636

APPENDIX 4

- Area map of Thunder Bay


10
11
4
3
1
8
7
6
2
5
9
Lake
Superior

APPENDIX 5

- Mailed questionnaire

		Completely agree	Mostly agree	Neither agree nor disagree	Mostly disagree	Completely disagree
g.	Too much alcohol can make anybody violent.........	1	2	3	4	5
h.	A fist fight between two men is sometimes necessary..................................	1	2	3	4	5
i.	It is normal for a man to hit somebody who provokes him.................................	1	2	3	4	5
j.	When a person does you wrong you should try to forgive him or her...............................	1	2	3	4	5
k.	Disagreements between people can always be resolved by talking things over..................	1	2	3	4	5
l.	Some men drink to have an excuse for fighting.....	1	2	3	4	5
m.	Alcohol brings out good things in many people.....	1	2	3	4	5
n.	A person who is drunk is not responsible for his actions......................................	1	2	3	4	5
o.	Some people drink to make it easier to show their feelings.................................	1	2	3	4	5
p.	We should forgive a person more easily for what he does when he is drunk........................	1	2	3	4	5

2. Secondly, we would like information on what you think stops most people from hurting another person physically even when they are really angry. Below we have listed six possible reasons. If you think the reason for not using physical force is important, circle 1. If you think the reason is not important to people in general, circle 2

		Important	Not important
a.	Because they are afraid of getting hurt themselves.................	1	2
b.	Because they are concerned about what people who see them will think	1	2
c.	Because they are concerned about what their family will say.........	1	2

(Cont'd)

ADDICTION RESEARCH FOUNDATION OF ONTARIO

THUNDER BAY SURVEY

---

1. First, a number of questions regarding your opinions on violence and factors that may be related to violence. Next to the statements below circle the number which indicates how strongly you agree or disagree with the statement.

If you completely agree circle 1

If you mostly agree (but not completely) circle 2

If you neither agree nor disagree circle 3

If you mostly disagree (but not completely) circle 4

If you completely disagree circle 5

Perhaps it helps to imagine how strongly you would agree or disagree with a person who uttered these statements. Many of the statements are pretty vague, but do not spend much time in trying to interpret them. Instead, try to give your immediate reaction ("gut reaction") to the statement.

		Completely agree	Mostly agree	Neither agree nor disagree	Mostly disagree	Completely disagree
a.	Violence in Canada has increased over the past five years..	1	2	3	4	5
b.	Alcohol is responsible for a large part of the violence in our society............................	1	2	3	4	5
c.	Violence on T.V. is responsible for some of the violent crimes committed in Canada...............	1	2	3	4	5
d.	Some people who are not at all aggressive when they are sober can get really violent after a few drinks....................................	1	2	3	4	5
e.	Children under 12 should not be allowed to watch people get killed on T.V.	1	2	3	4	5
f.	There are some areas in Thunder Bay where I do not feel safe walking alone after dark...........	1	2	3	4	5

(Cont'd)

6. When was the last time any of these things happened to you? Write in year.................. 1 9 ☐ ☐

7. Now a few questions about another type of aggressive behaviour that you may have experienced, that is, threats of physical violence. When you think of your past experience please do not include threatening remarks made jokingly. Also, do not count the occasions when you actually experienced physical violence in connection with a threat. (These experiences should have been covered in Question 4.) Which of the things listed below have happened to you since you were 15 years old? Again circle 1 if it has happened to you, circle 2 if it has not happened to you.

Since your 15th birthday:	Yes	No
a. Has anybody threatened you with a gun?................................	1	2
b. Has anybody threatened you with a knife?..............................	1	2
c. Has anybody threatened to hurt with some other weapon or object?......	1	2
d. Has anybody said he/she was going to kill you?........................	1	2
e. Has anybody said he/she was going to beat you up?.....................	1	2
f. Has anybody said he/she was going to hurt you in some other way?......	1	2

8. Thinking back over the last 12 months on how many occasions has somebody threatened you with some kind of weapon, that is, on how many occasions has a, b or c in Question 7 happened to you? Do not count any occasions when somebody actually hurt you physically. Write in the number of occasions in the box (write in 0 0 if it did not happen, 0 1 if it happened on one occasion etc.)... ☐ ☐

9. Again, thinking back over the last 12 months on how many occasions has somebody said something threatening to you, that is, on how many occasions has d, e or f in Question 7 happened to you? Do not count any occasions when somebody actually hurt you physically or when the threat was not seriously meant. Write in the number of occasions in the box (write in 0 0 if it did not happen, 0 1 if it happened on one occasion etc.)... ☐ ☐

10. When was the last time somebody threatened you in any of the ways listed in Question 7 ? Write in year... 1 9 ☐ ☐

	Important	Not important
d. Because they feel violence in wrong..............................	1	2
e. Because they do not want to get into trouble with the law..........	1	2
f. Because they are concerned about what their friends will say........	1	2

3. How much do you personally worry that you might be attacked or assaulted? Circle 1, 2 or 3.

I worry a lot	I worry a little	I do not worry at all
1	2	3

4. Now some questions about your personal experiences of violence. Do not include physical contact which is part of some sports and games or which was not intended to hurt you. Below is a list of some violent or aggressive things that can happen to people. Which of these things have happened to you since you were 15 years old? Include everything whether it was done by a person you know or a stranger. If it has happened to you circle 1. If it has not happened to you circle 2.

Since your 15th birthday:	Yes	No
a. Has anybody hit you with some kind of object?......................	1	2
b. Has anybody punched you (using his/her fist)?......................	1	2
c. Has anybody kicked you?..	1	2
d. Has anybody hurt you by throwing something at you?.................	1	2
e. Has anybody slapped you (using his/her hand)?......................	1	2
f. Has anybody hurt you by grabbing, pushing or shoving?...............	1	2
g. Has anybody hurt you physically in some other way?..................	1	2

5. Thinking back over the last 12 months, on how many different occasions has anybody hurt you in any of the ways listed in Question No. 4? Write in number of times (if none write in 0 0 if it has happened on one occasion write in 0 1 etc.)....................................... ☐☐

13. f. About twice a month.................... 6

g. About once a month...................... 7

h. Less often than once a month but at least once a year........................ 8

i. Less often than once a year............ 9

j. Never................................... 0

---

14. How long have you lived in Thunder Bay? Please write in number of years........................ ☐☐

15. In what year were you born? Write in the year.................................... ☐☐☐☐

16. In what country were you born? ______________________________

17. In what country was your mother born? ______________________________

18. In what country was your father born? ______________________________

19. Are you.. (Please circle 1 or 2)

Male............. 1

Female........... 2

Please check that you have answered all questions and return this questionnaire in the enclosed envelope.

THANK YOU FOR YOUR COOPERATION.

11. And now a question about violence that you may have witnessed, but not been involved in yourself. Again do not include playful aggressive behaviour or physical contact which is part of some sports. Do not include violence that you have seen on T.V., in the movies etc. but only in real life. Thinking back over the last 12 months have you seen somebody do any of the following things to another person? Again circle 1 if you have seen this and 2 if you have not seen this happen.

During the last 12 months:	Yes	No
a. Have you seen anybody hit another person with some kind of weapon or object?.	1	2
b. Have you seen anybody punch (using his/her fist) another person?............	1	2
c. Have you seen anybody kick another person?................................	1	2
d. Have you seen anybody hurt another person by throwing an object?............	1	2
e. Have you seen anybody slap (using his/her hand) another person?.............	1	2
f. Have you seen anybody hurt another person by grabbing, pushing or shoving?...	1	2
g. Have you seen anybody hurt another person physically in some other way?......	1	2

12. On how many different occasions during the last 12 months have you seen physical violence in real life as described in Question 11. Write in number of occasions in the box (write in $\boxed{0\,|\,0}$ if you have not seen this happen, $\boxed{0\,|\,1}$ if you have seen it happen on one occasion etc.).......... ☐☐

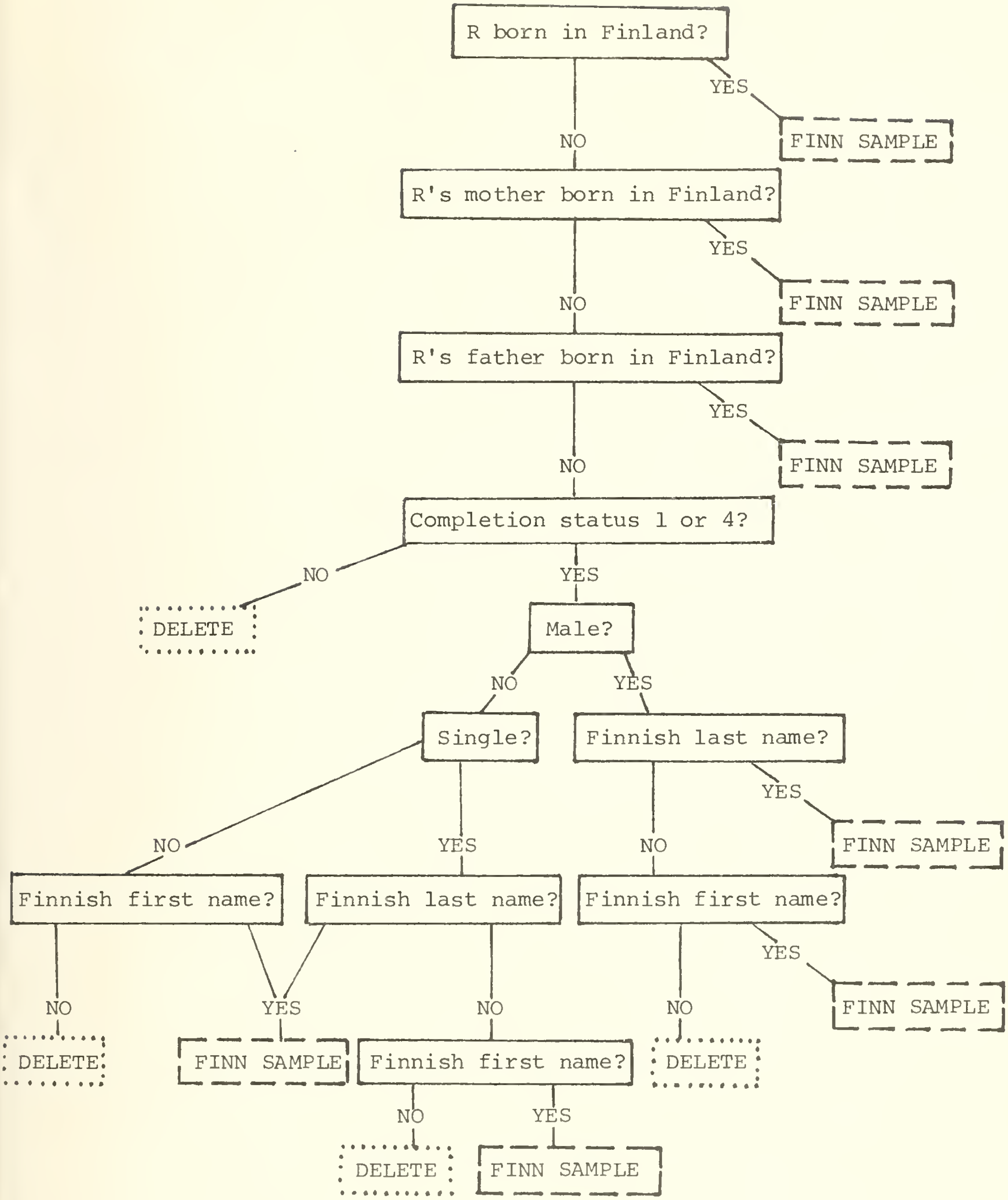
13. Now we would like some information about your own consumption of alcohol. How often do you yourself use alcohol? Please circle the number after what best describes how often you have at least one drink of beer, wine or spirits or any other kind of alcohol.

a. At least once a day.....................	1
b. Nearly every day.......................	2
c. Several times a week (3-4 times).........	3
d. Twice a week...........................	4
e. Once a week............................	5

(Cont'd)

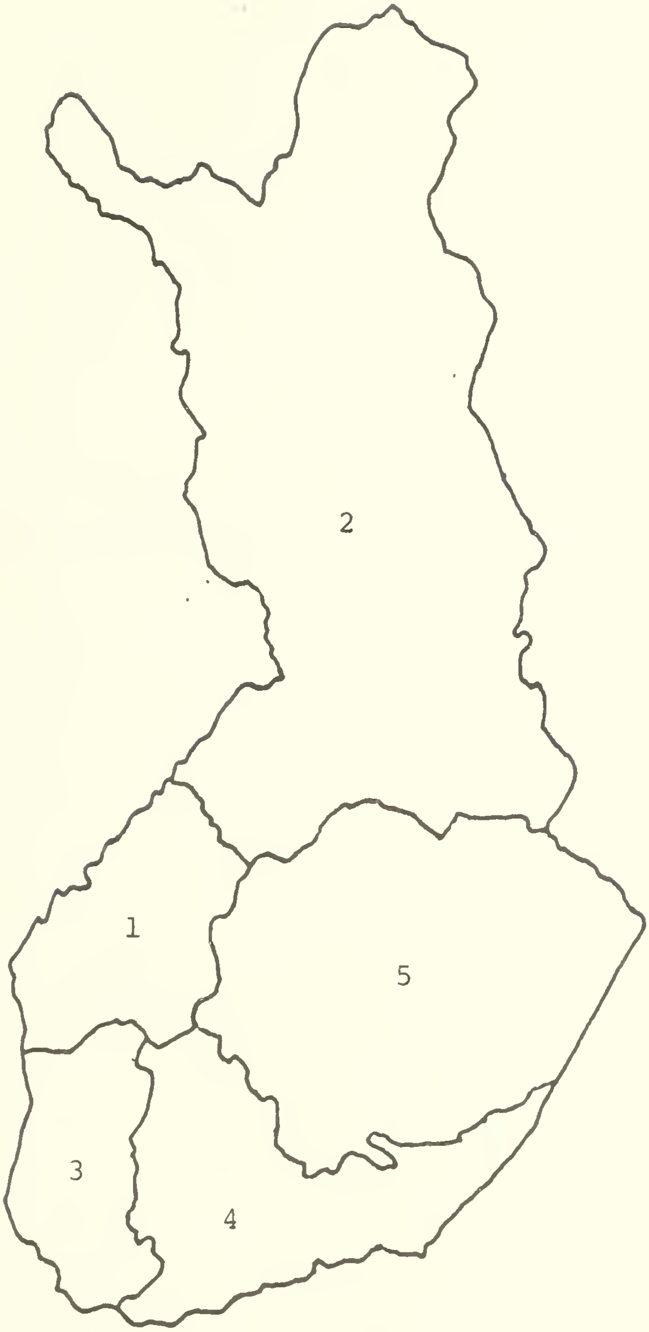
APPENDIX 6

- Flow chart for selection of Finnish sample


R born in Finland?
YES
FINN SAMPLE
NO
R's mother born in Finland?
YES
FINN SAMPLE
NO
R's father born in Finland?
YES
FINN SAMPLE
NO
Completion status 1 or 4?
NO
DELETE
YES
Male?
NO
YES
Single?
Finnish last name?
YES
FINN SAMPLE
NO
YES
NO
Finnish first name?
Finnish last name?
Finnish first name?
YES
FINN SAMPLE
NO
YES
NO
NO
DELETE
FINN SAMPLE
Finnish first name?
DELETE
NO
YES
DELETE
FINN SAMPLE

APPENDIX 7

- Areas of origin in Finland



1 = Vaasa

2 = Oulu + Lappi

3 = Turku and Pori

4 = Häme + Uusimaa + Kymi

5 = Keski-Suomi + Kuopio + Mikkeli + Pohjois-Karjala

(6 = Seceded areas; not shown)

APPENDIX 8

- Instructions to Thunder Bay police supervisors for ranking drinking establishments by risk of physical violence

As part of a study on the connection between alcohol use and aggressive behaviour we would need the help of your past experience. Please think back on the number of times when you have had to investigate occurrences of physical violence in drinking establishments. Based on this and your general knowledge of the establishments, please rate the drinking establishments on the appended list in terms of the risk that a fight or brawl would occur. For every establishment make a check mark in the appropriate column. In the "high risk" group, include the 5 to 10 establishments where you think the risk of violence is highest. In the "medium risk" group include at least 10 of the other drinking places. Except for these restrictions the number of establishments you want to include in the high, medium and low risk categories is open.

After having done this we would ask you to rank the drinking places which you have rated as "high risk" by marking the establishment where you think the risk is highest with a "1" beside the check mark, the second highest with a "2" etc. until you have ranked all the places in the "high risk" category.

Some establishments on the list may no longer be in business or have a license. If such is the case please cross out the name of the establishment. At the end of the list space has been provided for you to add the names of drinking establishment which we may have missed, or which have gotten their license after the list was made up. Please write in the name and rate these establishments just like all the others.

This rating procedure is meant to help us select a relevant sample for the observations we are planning to carry out in drinking establishments this fall.

Thank you for your assistance.

APPENDIX 9

- "Overview" coding sheet
- "Summary of activities" coding sheet
- "Violent incident" coding sheet
- Typical map of public drinking place

OVERVIEW

Team No.. ☐

Date...Day ☐☐

Month ☐☐

Name of establishment:_______________________

Room/section:_______________________________

Time of overview: .... ☐☐☐☐

No. of patrons in room/section:.................... ☐☐☐

No. of female patrons in room/section:.............. ☐☐☐

No. of patrons sitting at bar:......................... ☐☐

(REMEMBER TO MARK DOWN NUMBER OF PATRONS SITTING AT EACH TABLE (AND BAR) IN THE ROOM/SECTION ON YOUR MAP WHEN DOING THE FIRST OVERVIEW)

Which of the following are in use at the time of this overview:

	Yes	No	
T.V......................................	1	2	☐
Jukebox..................................	1	2	☐
Pooltable................................	1	2	☐
Shuffleboard.............................	1	2	☐
Stage, band..............................	1	2	☐
Dance floor (dancing)....................	1	2	☐
Other. Describe:_______________________	1	2	☐

Brief description of interaction between patrons, patrons and and waiters and other activities going on at the time of overview: _______________________________________

____

____

____

Additional comments (if any) on back

SUMMARY OF ACTIVITIES OF PATRONS AT TABLE OBSERVED

Team No.: ☐

Date: Day ☐☐

Month ☐☐

Name of establishment: ____________

Room/section: ____________

Beginning of shift Hour ☐☐

Names (fictitious) of patrons at table: ____________

Table (CIRCLE ONE): A 1 2 3 B 1 2 3 C 1 2 3 D 1 2 3

Extent of activities at table:

	Only a little	A fair amount	None at all	
1. Dancing	1	2	3	☐
2. Singing	1	2	3	☐
3. Eating	1	2	3	☐
4. Drinking toasts	1	2	3	☐
5. Play games for money	1	2	3	☐
6. Play games but not for money	1	2	3	☐
7. Conversation	1	2	3	☐
8. Watch T.V.	1	2	3	☐
9. Watch, listen to live entertainment	1	2	3	☐
10. Playing the jukebox	1	2	3	☐
11. Talking to patrons at other tables	1	2	3	☐

	Only a little	A fair amount	None at all	
12. Hugging	1	2	3	☐
13. Backslapping	1	2	3	☐
14. Shaking hands	1	2	3	☐
15. Kissing (cheek)	1	2	3	☐
16. Caressing	1	2	3	☐
17. Kissing (mouth)	1	2	3	☐
18. Necking	1	2	3	☐
19. Arguing	1	2	3	☐
20. Quarreling	1	2	3	☐
21. Shouting	1	2	3	☐
22. Laughing	1	2	3	☐
23. Crying	1	2	3	☐
24. Pushing, shoving	1	2	3	☐
25. Showing off, bragging	1	2	3	☐
26. Playful aggressive behaviour	1	2	3	☐
27. Serious aggressive behaviour	1	2	3	☐
28. Threatening gestures	1	2	3	☐
29. Signs of intoxication - slurred speech, unsteady walk, gestures etc.	1	2	3	☐

30. Other activities of which there was a fair amount: ____________

AGGRESSIVE OR VIOLENT INCIDENT

1. Team No.................... ☐

2. Date.................Day ☐☐

Month ☐☐

3. Name of establishment: ____________

____

4. Room/section: ______________

5. Time of incident.... ☐☐☐☐

6. Number of persons involved in aggressive act........ ☐☐

7. Nature of aggressive act(s)

		Yes	No	
a.	Verbal abuse.....	1	2	☐
b.	Threats..........	1	2	☐
c.	Pushing,shoving..	1	2	☐
d.	Slapping(face)...	1	2	☐
e.	Hitting with fist	1	2	☐
f.	Hitting w. weapon Describe: ____________	1	2	☐
g.	Throwing object(s) Describe: ____________	1	2	☐
h.	Kicking..........	1	2	☐
i.	Other............ Describe: ____________	1	2	☐

8. Short description of sequence of actions leading up to incident: (How and why did it start? What was it about? When Person I started cussing at Person II, what did Person II do etc.) ____________

____

____

8. (cont'd) ______________________________

____

____

____

____

____

9. Where there any peacemakers trying to stop the incident?

	Yes	No	
By pleading...........	1	2	☐
By threatening........	1	2	☐
By physically intervening...............	1	2	☐
By calling on the management etc........	1	2	☐
Other................ Describe: ____________	1	2	☐

____

____

10. Description of persons involved:

Person I

Aggressor	Victim	Peacemaker	
1	2	3	☐

Age........................... ☐☐

Male	Female		
1	2	....	☐

Other characteristics: ____________

____

____

Degree of intoxication:

No signs	Slight	Moderate	Heavy	
1	2	3	4	☐

____

Person II

Aggressor	Victim	Peacemeaker	
1	2	3	☐

10. Person II (cont'd)

Age.................... ☐☐

Male Female
1 2 .... ☐

Other characteristics: ______

____

____

Degree of intoxication:
No signs Slight Moderate Heavy ☐
1 2 3 4

Person III

Aggressor Victim Peacemaker ☐
1 2 3

Age.................... ☐☐

Male Female
1 2 .... ☐

Other characteristics: ______

____

____

Degree of intoxication:
No signs Slight Moderate Heavy ☐
1 2 3 4

Person IV

Aggressor Victim Peacemaker ☐
1 2 3

Age.................... ☐☐

Male Female
1 2 .... ☐

Other characteristics: ______

____

____

Degree of intoxication:
No signs Slight Moderate Heavy ☐
1 2 3 4

IF MORE THAN 4 PERSONS INVOLVED FILL OUT SAME INFORMATION FOR EACH ON THE BACK OF THIS PAGE

11. Relationship between people involved (as far as you can determine): ______

____

12. How did the other patrons, waiters bouncers react during and after the incident? ______

____

____

____

13. How did the incident end? ______

____

____

____

____

14. Were there any injuries?

	Yes	No	
To Person I........	1	2	☐

Describe: ______

____

	Yes	No	
To Person II	1	2	☐

Describe: ______

____

	Yes	No	
To Person III......	1	2	☐

Describe: ______

____

	Yes	No	
To Person IV.......	1	2	☐

Describe: ______

____

MARK LOCATION OF THE INCIDENT ON YOUR MAP OF THE ESTABLISHMENT

15. Other comments: ______

____

____

____

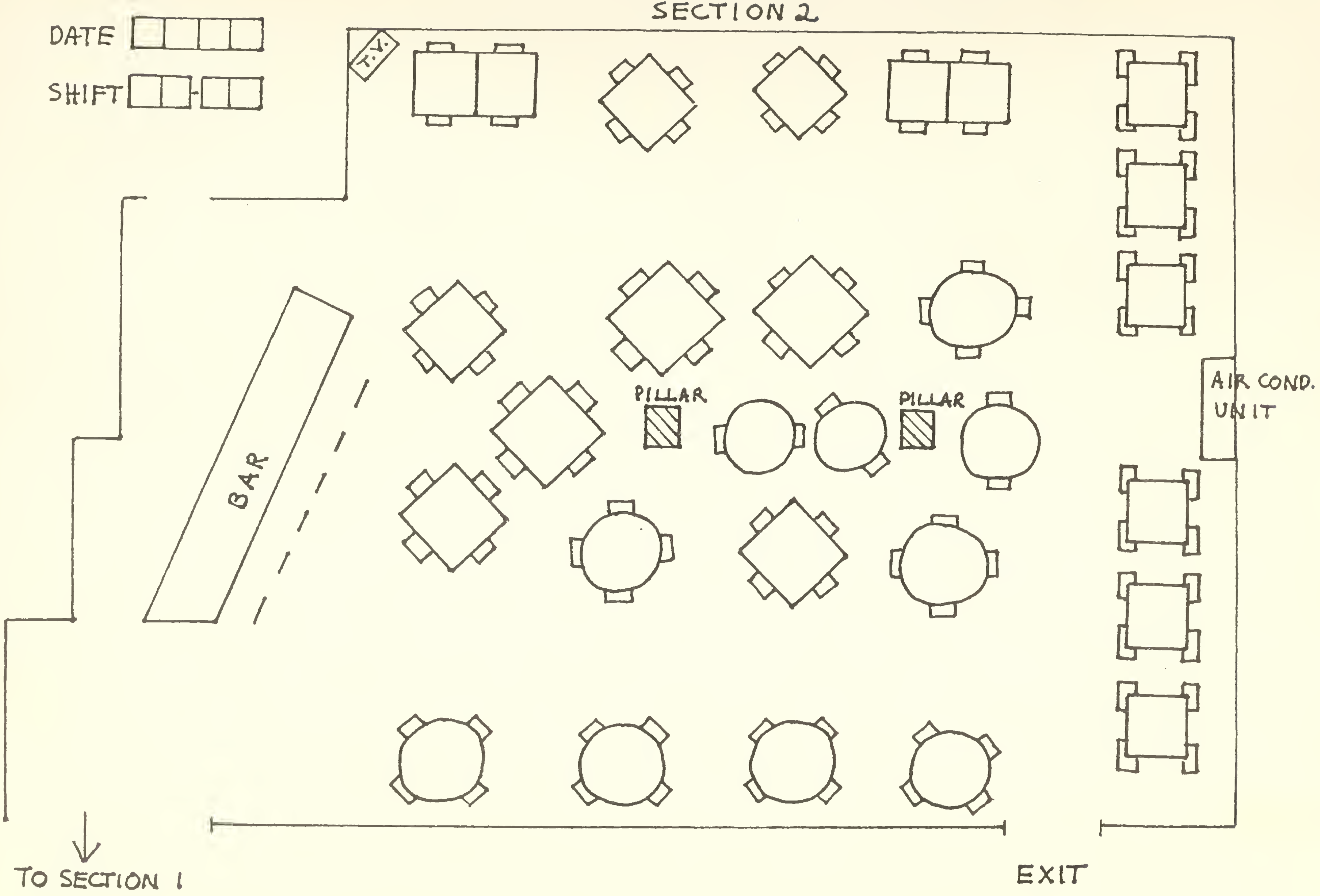
____

____

TEAM ☐

DATE ☐☐☐☐

SHIFT ☐☐-☐☐



APPENDIX 10

- Transcript of an observational session

PLACE PRETTY WELL FULL, 3/4 OF THE PEOPLE INTOXICATED

TABLE A:

John - Male, caucasian, 42 years, parka, shirt and tie, slacks, drinking draft beer, no signs of intoxication,

Lisa - 37-38 years, native Indian, neatly dressed, turtle neck, ski jacket, drinking draft beer, moderately intoxicated.

Tom - 43 years, male, native Indian, grubby clothes - shirt and jeans, moderate to heavy intoxication, drinking draft beer. Walked to other room.

Brian - Male, native Indian, grubby shirt and pants, moderate to heavy intoxication, drinking draft beer, pretty quiet.

Charlie Male caucasian, casual suit, pants, ski jacket, drinking Pepsi Cola. John and Lisa most of conversation, others pretty quiet.

TABLE C:

Mary - 66 years, female, caucasian, overcoat, dress, drinking a draft, moderately intoxicated.

Bill - 68 to 69 years, male, caucasian, sweater, work pants and boots, drinking draft, moderately intoxicated.

Harry - 45 years, male, caucasian, shirt and tie, drinking draft, moderately intoxicated,

4:06 When they first came in Mary and Bill seemed to be having a slight argument. Now most of the conversation is between Bill and Harry. An Indian woman (45 years) from another table comes up and talks to Harry.

(INDIAN WOMAN DANCING IN THE MIDDLE OF THE FLOOR. HEAVILY INTOXICATED, SHE PUTS ARM AROUND MARY AND STARTED SAYING SOMETHING TO HER BUT MARY TURNED HER HEAD AWAY AND STARTED LAUGHING - THE WAITRESS HAS COME OVER TO HER AND TOLD HER TO GET UP AND GET OUT).

TABLE A:

4:10 Charlie goes to men's section. New Patron - Baldy

Baldy - 50 years, male caucasian, European, leather coat, slacks, sits in Charlie's chair. Tom returns.

TABLE C:

4:12 Mary to washroom

TABLE A:

4:15 Baldy leaves table

TABLE B:

Baldy - (from Table A)drinking a beer. No sign intoxication.

Joe - male, European, leather coat, casual shirt, jeans, drinking beer, no sign intoxication. Speaking a foreign language.

Andy - 22 years, male, looks Italian, sweat shirt, jeans, drinking a beer, no signs of intoxication.

4:22 All members have bad breath, salami? garlic? Baldy takes out a package of Clorets and passed them around. Joe gives his back.

TABLE A:

4:26 Charlie returns - has been wandering around men's section.

TABLE C:

4:27 Mary and Harry 2 draft each, 1 draft for Bill.

TABLE A:

4:31 Charlie to men's section. Bored - hasn't been talking. Brian to men's section. (THE WOMAN WHO HAD BEEN DANCING AROUND PICKED HER COAT UP FROM TABLE C. TOOK IT TO ANOTHER TABLE AND STARTED DANCING AROUND).

4:40 John got up to leave. Put his hat on. John started dancing around. Tom and Lisa say "You can't even dance"- laughter. John to Table B, has a few words with Baldy and Joe. Went through men's section.

TABLE C:

Indian puts down her coat at Table C. Dancing around. Sits down, complains loudly that the waitress won't serve her any more and that she'd really like another beer. Bill says "Slow down", but she kept talking loudly, yelling, heavily intoxicated. Bill told her to shut up and mind her own business.

TABLE A:

Charlie comes up to table and talks. Tom says "OK meet you on the other side".

Lisa calls out to Indian woman being evicted, "Goodbye, goodbye".

A FEW OTHER PATRONS IN THE BAR CALL OUT GOODBYE TO INDIAN WOMAN

TABLE C:

Mary feeling uncomfortable. The waiter and waitress arrive, each takes an arm picked her* up and took her to the door. Bill calls out "Goodbye". After putting her out the door the waiter comes back and shakes Bill's hand.

TABLE A:

After putting Indian woman out the door the waitress sits and talks to Lisa and Tom.

4:46 Tom to men's section

4:47 Four draft left at table

TABLE C:

4:47 Bill to men's section

TABLE A:

4:50 Tom returns. Had been talking to some Indian patrons on way back to table. Lisa to washroom.

4:52 Lisa returns stopping to talk to a male caucasian patron, 25 years, on the way back. Before she sits the waitress comes up to her and sends her to the bar, probably to phone.

TABLE C:

4:57 Mary yelling at Harry and slapping him on the arm. Harry ignores her.

He takes a big gulp of beer. She hits him on the shoulder and says "Don't drink like that". Mary laughs and tries to get Harry to laugh. It seems she is trying to get him to go home.

TABLE A:

4:59 Lisa returns

*Indian woman, not Mary

TABLE C:

5:03 Mary continues harping to Harry. Bill comes back into room from third section. Harry gets up and follows him out. Mary gets up and follows Harry out still harping and yacking. She said goodbye to a couple of Indian ladies. "I'll call you next week". On her way out she swings on a post to get around the corner heavily intoxicated.

5:06 (GO-GO RETURNS, DANCES AROUND, SITS AT A TABLE)

5:12 (THINGS HAVE QUIETED DOWN 1/2 - 3/4 OF PATRONS HAVE LEFT THE BAR).

TABLE B:

Baldy and Joe leave.

TABLE C1:

Randy: - 21 years, male, caucasian, levi jacket, faded jeans, drinking a beer, no signs of intoxication.

Don - 20-21 years, leather coat, blue jeans, drinking a beer. Looking around - not much conversation. Randy plays some tunes on the juke box. A young Indian woman walks into the room - Randy and Don look at her smiling - then at each other aglow.

TABLE A:

5:22 Tom to men's section

TABLE C1:

5:23 Randy to bar

5:25 Randy returns from bar, pulls some money out of his pocket and gave it to Don. Don went up to the bar and then to men's section.

5:26 Don returns with cigarettes.

TABLE A:

5:26 Tom returns

Table C1:

5:31 Waitress sits down. Handful of money. Has a small book looking through it with Don. Then goes to bar - brings back a draft for Randy.

TABLE B2:

5:35

Betty - female, caucasian, (have observed a few times in here) leather coat, neatly dressed, drinking 7UP. No signs of intoxication. 45-57 years.

Lou - female native Indian, checkered jacket, jeans, neat. Drinking draft, 37 years, slight - moderate intoxication. These two had been sitting at another table and Curly called them to join her.

Curly - female, caucasian, kerchief, overcoat, 67-70 years. She has been here since observers arrived and a few people have joined her and left. She has had a few draft. Moderately - heavily intoxicated. Chatting (all 3 participate).

TABLE C1:

5:42 Don and Randy finish drinks and leave - no signs of intoxication.

TABLE B2:

5:55 Betty gets a 7UP, Curly 2 drafts, Lou 2 drafts

TABLE C2:

5:56

Alfred - male, caucasian, no signs intoxication. 2 draft, 20-22 years, faded jeans, ski jacket, T-shirt.

Fernando male, caucasian, no signs intoxication, 2 draft - overcoat 21-22 years, T-shirt, jeans

Rick - 49-50 years, male, caucasian, no signs of intoxication, 2 drafts, overcoat, slacks.

TABLE D:

Alex - 40-42 years, male, caucasian

Larry - 45-50 years, male, caucasian, moderately intoxicated, standing near table.

Grey - Young guy

Indian - female, caucasian, "girl".

Alex gets up, reached over to Indian, gave her a real slap across the face almost knocked her off the chair. She sat with her head hanging.

(INCIDENT IN BAR - SEE TABLE D - GAINS EVERYONE'S ATTENTION)

TABLE A:

6:08 Tom went over to talk to Indian girl. Lisa to washroom.

TABLE D:

6:08 Grey looked sick about it, leaned back.

Larry said, "Hey what's with you?" Alex raises his fist and puts his coat back ready to fight. Larry backs off. Alex stormed past Larry shoving him out of the way and left the bar. Larry tries to comfort Indian girl. Grey took beer and coat and moved to another table and tells another male patron what happened. Alex asked Indian girl to go home with him. He had been sitting with her most of the afternoon. She said "No" and that's when he slapped her.

TABLE A:

6:10 Tom and Lisa 2 drafts each (EVERYTHING BACK TO NORMAL IN BAR).

TABLE D:

6:14 Larry sits down at table and Whitey - 45 years. Indian woman, well dressed, Larry has a beer. Whitey a coke.

TABLE C 2

6:15 3 patrons leave bar - no signs intoxication

TABLE D:

6:16 Alex comes back into the bar. Said a few words to Larry (wearing exact same overcoat - company). Sits across from Indian again. She looks a bit scared.

TABLE B2

6:20 Curly and Betty to washroom

6:23 Curly and Betty return.

TABLE A:

6:25 New Patrons

Phillip - 47 years, overcoat, shirt, slacks, worker, male, caucasian. No signs intoxication.

Robert - 50 years, overcoat, casual shirt, slacks, works with Tom and Phillip.

TABLE A:

6:30 Phillip and Robert get a beer

TABLE D:

Whitey got up and went to bar - waitress ready for work.

6:25 Larry gets up - leans down and talks to Indian into her ear. Then left.

Allan - O.P.P. half Indian, 34 years, knows Indian. When he sat down, Indian got up and went to washroom. When Indian was in the washroom, Allan walked over to table where Grey was sitting. They told him what had happened earlier. He flushed with anger. Alex avoided his look. Indian returned to table D. Allan went to table D ,took her by the arm and moved her to other (C3) table. He asked her about the incident. She didn't want to answer. "Did he slap you?" "No". "He slapped you on the face didn't he?" "He tapped me on the head". Indian heavily intoxicated.

TABLE B2:

6:42 Lou asks Hat to come and sit with them. He does, saying "Jesus Christ, you're going to cost me $5.00 for a round".

Hat - Fifty years, overcoat, casual shirt and pants, drinking a draft, moderately intoxicated. Joking, laughing.

TABLE C3:

Indian, Allan, Grey and Ron, - male Indian, 26 years, drinking a beer, moderate intoxicated, overcoat, slacks.

TABLE C3:

6:45 Allan went to bar and got an empty glass and went to Table D. Indian is heavily intoxicated. Said something to Blue - who has joined table D.

TABLE D:

Blue female Indian, casual shirt and slacks.

Allan went back to other table, (C3) says to Indian "Go sit with him if you want. I don't care". Allan and Indian play fighting but she gets serious grabbing and hitting.

TABLE A:

6:50 Tom to washroom - not much conversation at that table.

6:51 Tom returns.

TABLE A:

6:55 New Patron

Freida - Overcoat, casual but nice blouse and slacks, drinking coke, no signs of intoxication.

All 5 talking and laughing.

TABLE B2:

Two drafts for Hat. Betty and Lou having a riot, jokes, laughter, Lou moderately intoxicated. Touching a lot. Curly and Hat talking a lot.

TABLE C3:

Indian got up swinging at Allan again. He gave her a push into her seat. The chair fell over and she landed on the floor. The waitress comes over and yells at Indian. Allan had been quiet but Indian started this.

TABLE D:

Blue seems to be sitting alone. Alex tries making passes. She ignores him.

6:56 Alex grabs Blue's hand, says something to her. She pulled her hand away, folded her arms, laughed and moved away being cautious -
6:59 Blue got up and left - was waiting for a cab.

TABLE A:

7:00 Tom - moderately heavily intoxicated
Lisa - moderately intoxicated
Robert - no signs of intoxication
Phillip - no signs of intoxication
Freida - no signs of intoxication

TABLE B2:

Betty - no signs of intoxication
Lou - moderately to heavily intoxicated
Hat - moderately to heavily intoxicated
Curly - moderately to heavily intoxicated

TABLE C3:

Allan finished draft and got up and went to other side. Came back and sat down looking at Indian.

TABLE C3

Allan - slight to moderately intoxicated
Indian - heavily intoxicated
Grey - slightly intoxicated
Ron - moderately intoxicated.

(THE PLACE HAS STARTED TO FILL UP AGAIN IN THE LAST HALF HOUR)

Indian keeps hitting etc. Allan tries to settle her down.

APPENDIX 11

- General occurrence field report used by police
- Coding sheet for violent crime occurrences used in study

General Occurrence Field Report

– Print All Names –

File No.

OCCURRENCE

(1) Nature

Reported Time Date

(2) Location

Area

Occurred Time Date

(5) Investigation By

Time Date

VICTIM

(3) Name

DOB or approx. age

Sex M☐ F☐

Address

Telephone

COMPLAINANT

(4) Name

Address

Telephone

Relationship to victim

(6) Accused/Suspect: ☐ Arrested ☐ Warrant ☐ Summons ☐ Undertaking to appear ☐ Summ. Conv. Tick. ☐ Caution

(Name, D.O.B. or Approx. Age, Sex, Address, Driv. Lic., Charges; – or – Describe Suspect (s) and / or Vehicle (s))

(7) REMARKS (Show Additional Details of Occurrence ; Describe and Value – Property, Damage, Injury, Etc.)

(8) Submitted By

signature

(12) Approved By

signature

(9) CONCLUDED ☐

(10) FOLLOW-UP REQUIRED BY – Indicate By Letter as Below

(11) N.B. – Indicate Information Copies To (✓)

A – Uniform ☐

B – Traffic ☐

C – C.I.B. ☐

D – Youth ☐

E – Morality ☐

F – Court ☐

G – Circular ☐

H – Other (specify) ☐

TB400 (rev. 4 / 74)

(USE CONTINUATION FIELD REPORT AS NECESSARY)

Continuation Field Report

– Print All Names –

Page

File No.

1 Nature of Occurrence

2 Name and Address of Victim or Complainant

3 Time and Date of Original Report a.m. p.m. day month year

4 This Investigation By

5 Time a.m. p.m. Date day month year

6 Accused / Suspect ☐ Arrested ☐ Warrant ☐ Summons ☐ Undertaking to Appear ☐ Summ. Conv. Tick. ☐ Caution
(Name, D.O.B. or Approx. Age, Sex, Address, Driver's Licence No., Charges or Describe Suspect(s) and / or Vehicle(s)

7 **REMARKS** Show Additional Details of Occurrence; Describe and Value – Property, Damage, Injury, etc.

8 Submitted By signature

9 CONCLUDED ☐

10 FOLLOW – UP REQ'D BY – (Indicate by Letter as Below)

11 NB: Indicate Information Copies To (✓)

A – Uniform ( )
B – Traffic ( )
C – C I B. ( )
D – Youth ( )
E – Morality ( )
F – Court ( )
G – Circular ( )
H – Other specify ( )

12 Approved By signature

TB401 (rev 3/74)

Use Continuation Field Report as Necessary

File No.______________________

OCCURRENCE

Nature of occurrence ☐

1. Homicide
2. Wounding
3. Assault causing bodily harm
4. Other assault
5. Rape
6. Other sexual offence
7. Robbery

Time when reported ☐☐☐☐

a.m. = 1 p.m. = 2 ☐

Location of occurrence ☐

1. Home of suspect
2. Home of victim
3. Somebody else's home. Specify:
____
4. In a tavern or bar. Give name:
____
5. In the street or in a park
6. Other. Specify:______________
____

Area of city ☐☐

Time of occurrence ☐☐☐☐

a.m. = 1 p.m. = 2 ☐

VICTIM

Date of birth — Year ☐☐ Month ☐☐ Day ☐☐

or approximate age ☐☐

Sex of victim ☐

1. Male
2. Female

Had the victim been drinking alcoholic beverages? ☐

1. Yes
2. No
3. Not known

Additional details on alcohol consumption:

Type and amount:______________________
____

Length of drinking, e.g. hrs,days before occurrence
____

COMPLAINANT

Relationship to victim ☐

1. Victim him/herself
2. Relative. Specify:______________
3. Neighbour
4. Friend
5. Other. Specify:______________

If not victim him/herself, did complainant witness occurrence? ☐

1. Yes
2. No
3. Not known

ACCUSED/SUSPECT

Date of birth — Year ☐☐ Month ☐☐ Day ☐☐

or approximate age ☐☐

Sex of accused/suspect ☐

1. Male
2. Female

Had the accused/suspect been drinking alcoholic beverages? ☐

1. Yes
2. No
3. Not known

Additional details on alcohol consumption:

Type and amount:______________________
____

Length of drinking, e.g. hrs, days before occurrence: ______________________

ADDITIONAL DETAILS ON OCCURRENCE

Was the occurrence declared ☐

1. Unfounded
2. Cleared by charge
3. Cleared otherwise
4. Not cleared (inactive)

Was there more than one victim? ☐

1. Yes
2. No

Was there more than one accused/suspect? ☐

1. Yes
2. No

ADDITIONAL DETAILS (CONT'D)

Means of attack ☐

1. Weapons, tools. Specify:____________

   ____
2. Fists or bare hands
3. Other. Specify:______________________

   ____
4. No mention of manner

Object of attack ☐

1. Not known
2. Verbatim from report:_______________

   ____

   ____

Relationship of accused/suspect to victim ☐

1. Wife/husband
2. Girlfriend/boyfriend
3. Mother/father
4. Daughter/son
5. Other relative. Specify:____________

   ____
6. Friend or acquaintance
7. Stranger
8. Not known

Date of occurrence ☐☐ ☐☐

Month Day

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BINDING SECT. MAY 22 1980

Date Due

JAN 22 1981	MAR 31 1993
FEB 3 1981	
MAR 24 1981	
FEB 23 198[illegible]	
MAR 16 198[illegible]	
NOV 15 1982	
FEB 23 1983	
APR 2[illegible] 1983	
APR 28 1983	
JUN 30 1983	
APR 5 1984	
APR 12 1984	
NOV 21 198[illegible]	
FEB 28 1985	
FEB 11 1986	
FEB 20 1986	
MAR [illegible] 1986	
MAR 31 1986	
FEB 10 1987	

HV
5053
P46
v.1

Pernanen, Kai
Alcohol and agressive behavior

DATE DUE	BORROWER'S NAME

HV
5053
P46
v.1

Pernanen, Kai
Alcohol and agressive behavior

Criminol